

AMERICAN

OCTOBER • 1955

# Cinematographer

THE MAGAZINE OF MOTION PICTURE PHOTOGRAPHY



*In This Issue ...*

- The Superscope Process
- CinemaScope on 55mm Film
- Jackie Gleason Goes "Live on Film"

25c

FOREIGN 35c





**FOR SALE**

**FOR RENT**

**EITHER WAY, YOU PAY  
NO MORE FOR THE WORLD'S  
FINEST LIGHTING AND  
PRODUCTION EQUIPMENT**

Lamps, Cable,  
Switchboards, Dimmers,  
Portable Generators  
Stands, Hangers, and  
Accessories  
New "Dual Steering"  
Crab Camera  
Dolly for Television and  
Motion Picture Studios

**FREE! Write for colorful new  
catalog-brochure:  
"New Dimensions in  
Controlled Studio Lighting"**

**J.G. McAlister Inc.**

1117 North McCadden Place  
Hollywood 38, California



# SALES • SERVICE • RENTALS



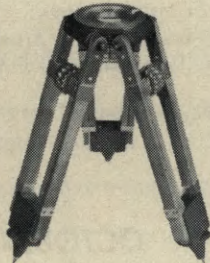
THE WORLD'S MOST COMPLETE ASSORTMENT  
OF PHOTOGRAPHIC EQUIPMENT FOR

## T.V. and Motion Picture Studios

New **PROFESSIONAL JUNIOR**

Adjustable wood **BABY TRIPOD**

—for Prof. Jr. friction  
and geared heads



Has substantial shoe and spur.

Measures from floor to flange

25" extended —17"  
collapsed. **\$75**

FAMOUS  
"controlled  
action"

**SMALL GYRO**  
TRIPOD

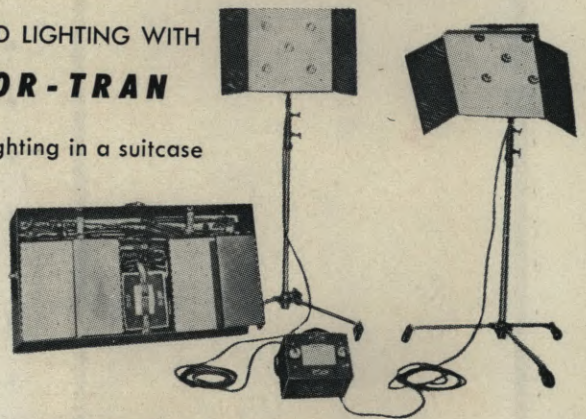
Two speeds—slow and fast  
—for both panning and tilting.  
Helps you capture fine scenic views  
and fast-moving sports events. Espe-  
cially recommended for 16mm Mitchell,  
16mm Maurer, B & H Eyemo  
and similar cameras.

**\$600**

PACKAGED LIGHTING WITH

**COLOR-TRAN**

—studio lighting in a suitcase

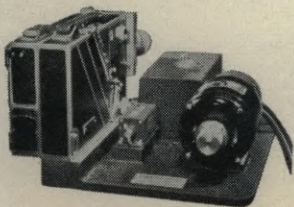


Imagine being able to use two 5000 watt units  
on a 30 amp. fuse — **COLOR-TRAN** will do it!  
Kit contains 2 light heads, 2 Superior stands and  
proper size **COLOR-TRAN** converter to match.  
Packed in compact case.

Senior Kit  
**\$237.50**

Other style  
kits available.

Write for **COLOR-TRAN** Catalogue.



**STOP MOTION MOTOR**  
FOR CINE KODAK SPECIAL

Runs forward or reverse, 110  
AC synchronous motor with frame  
counter. May be run continuously  
or for single frames. Camera  
mounts without special tools.

**\$550**

Also available — Stop Motion  
Motors for 16mm—35mm B & H,  
Mitchell and other professional  
cameras.



**ELECTRIC**  
**FOOTAGE TIMER**

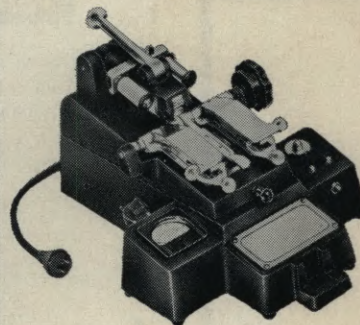
Dual model for both 16mm  
and 35mm. Large white num-  
erals on black background. Accu-  
rate reset dial. Switch controlled  
by operator, who selects either  
16mm operating at 36 feet per  
minute—or 35mm operating at  
90 feet per minute . . . or both  
in synchronization.

**\$95**

Single model, either 16mm or  
35mm **\$45**

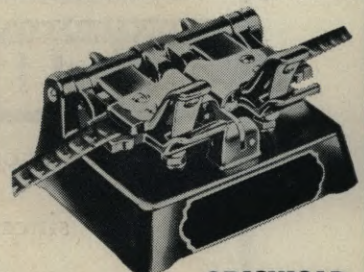
**presto-splicer**

GIVES PERMANENT SPLICE  
IN **10 SECONDS!**



Especially good for splicing magnetic  
film. Butt Weld type for non-perforated  
or perforated film. 16mm, 35mm or  
70mm. **\$547.80**

16mm or 35mm models—  
for perforated film.



**GRISWOLD**

**HOT FILM SPLICER**

Model R-2 for 35mm silent and sound  
film. Precision construction makes it easy  
to get a clean, square splice with accu-  
rate hole spacing. Nothing to get out of  
order. **\$65**

Also Bell & Howell 8mm, 16mm and  
35mm Hot Splicers and B & H Labora-  
tory model Foot Splicer.

\*9.5mm Lenses in 16mm C mount. 18.5mm (extreme wide angle-flat field)  
Lenses available in mounts for all 35mm Motion Picture Cameras.  
\*PHOTO RESEARCH Color Temperature Meters. \*Electric Footage Timers  
\*Neumade and Hollywood Film Company cutting room equipment.  
\*Griswold & B.&H. Hot Splicers. \*DOLLIES—Bardwell-McAlister, Mole  
Richardson, Century and Colortran Lighting Equipment.

Complete line of 16mm and 35mm Cameras

FRANK C. ZUCKER  
**CAMERA EQUIPMENT CO.**  
1600 BROADWAY NEW YORK CITY



to you . . .

whose  
intelligent

demand

has  
helped

us

create

quality

. . . our  
sincere  
gratitude  
and  
appreciation

CONSOLIDATED  
FILM  
INDUSTRIES



959 Seward St., Hollywood 38, Calif.  
1740 Broadway, New York 19, N. Y.

AMERICAN

# Cinematographer

THE MAGAZINE OF MOTION PICTURE PHOTOGRAPHY  
PUBLICATION OF THE AMERICAN SOCIETY OF CINEMATOGRAPHERS

ARTHUR E. GAVIN, *Editor*

MARION HUTCHINS, *Editorial Assistant*

EMERY HUSE, *Technical Editor*

EDITORIAL ADVISORY BOARD: John Arnold, Arthur Edeson, Lee Garmes, Charles  
Rosher, Leon Shamroy, Fred Gage, Glenn R. Kershner

Editorial and Business Office: 1782 N. Orange Dr., Hollywood 28, Calif.

Telephone: HOLlywood 7-2135

VOL. 36

OCTOBER • 1955

NO. 10

## In This Issue

### ARTICLES

CINEMASCOPE ON 55MM FILM—By Arthur E. Gavin	582
GLEASON GOES "LIVE ON FILM"—By Leigh Allen	584
PREPARATION OF 16MM PRINTING LEADERS	586
ANIMATION MAJOR FACTOR IN PRODUCTION OF TV AD FILMS— By Vern W. Palen	588
THE SUPERSCOPE PROCESS—By Wilfrid Cline, A.S.C.	591
FILMING FOR PHILCO—By Roy Zeper	592
FILMING THE BIRTH OF A NEW AUTOMOBILE—By Al Vaughan	595

### AMATEUR CINEMATOGRAPHY

TIME LAPSE TRANSITIONS—By Harold Benson	596
THE CASE FOR HAND-LETTERED TITLES—By John Forbes	597

### FEATURES

WHAT'S NEW IN EQUIPMENT, ACCESSORIES, SERVICE	568
INDUSTRY NEWS	572
HOLLYWOOD BULLETIN BOARD	574
HOLLYWOOD STUDIO PRODUCTION	614

### ON THE COVER

TO CHARLES G. CLARKE, A.S.C. (in checkered shirt, hat and sunglasses) fell the honor of being first director of photography to shoot a feature picture with 20th Century-Fox's new 4X-55mm camera. Scene is Boothbay Harbor, Maine, where initial scenes of T.C.F.'s "Carousel" are being filmed. Sol Halprin, A.S.C., one of the camera's developers, is at far right. Article describing camera appears in this issue, beginning on page 582.

AMERICAN CINEMATOGRAPHER, established 1920, is published monthly by the A. S. C. Agency, Inc., 1782 N. Orange Dr., Hollywood 28, Calif. Entered as second class matter Nov. 18, 1937, at the postoffice at Los Angeles, Calif., under act of March 3, 1879. SUBSCRIPTIONS: United States and Canada, \$3.00 per year; Foreign, including Pan-American Union, \$4.00 per year. Single copies, 25 cents; back numbers, 30 cents; foreign single copies, 35 cents; back numbers, 40 cents. Advertising rates on application. Copyright 1955 by A. S. C. Agency, Inc.



the

and only...

**Mitchell** \*

Professional Equipment for Professional Results

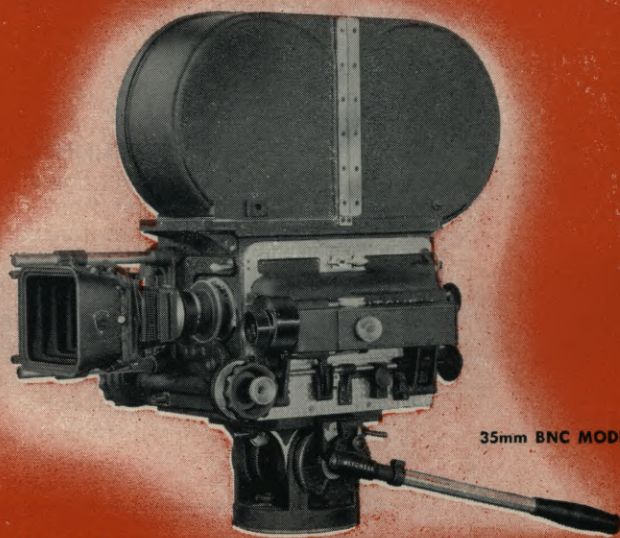
*World's Finest  
16mm and 35mm Cameras!*

For over 25 years, Mitchell Cameras have set professional photographic standards for the Motion Picture Industry. These flawlessly designed, ruggedly constructed cameras have proven themselves in smooth, positive operation under the most exacting conditions. Today, as yesterday, the World's greatest films depend upon Mitchell—professional equipment for truly professional results.



16mm PROFESSIONAL

The 16mm Professional has the same proven Mitchell 35mm features—to bring 35mm quality to 16mm screens. Equipped with 16mm Mitchell blimp, this camera is a favorite of leading commercial producers for sound photography.



35mm BNC MODEL

The Mitchell 35mm Camera—standard equipment of major studios—is internationally known for dependability and performance. For superb photography, Mitchell 35's are available in BNC (blimp unnecessary); NC and Hi-Speed models to meet every requirement.

**Mitchell Camera CORPORATION**

666 West Harvard Street • Glendale 4, Calif. • Cable Address: "MITCAMCO"



85% of the professional motion pictures shown throughout the world are filmed with a Mitchell





*Magnaphonic*  
SOUND SYSTEM

*Producers!*  
**Bring dubbing costs DOWN and  
CONTROL sound quality  
with Magnasync X-400 Type 13 dubbers**

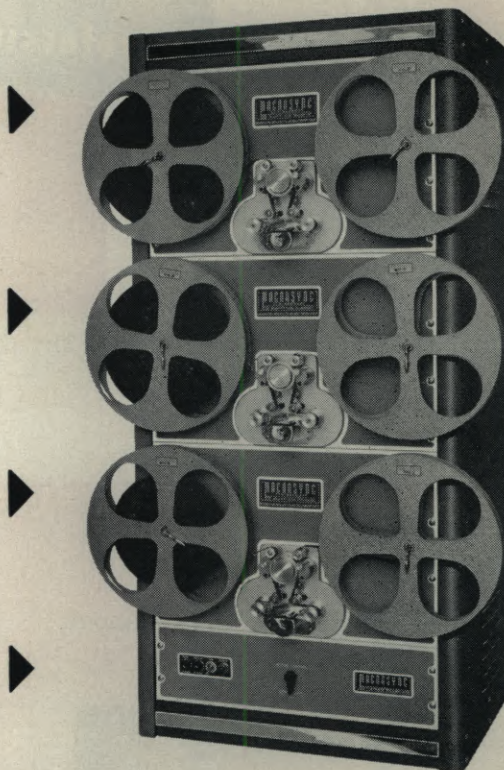
As significant as the tremendous savings made possible by Magnasync magnetic film recording is the degree of **quality control** which it affords the exacting producer. In mixing, dubbing and transfer work the Magnasync X-400 permits you a degree of perfection which you can achieve consistently by doing the work yourself.

**SOUND EFFECTS** edited to fit the script with blank leader stock between split-second synchronized effects. (Loop rack attachment available).

**MUSIC TRACK** scored to packaged picture. Music can be rescored without affecting other portions of the master track.

**DIALOGUE TRACK** recorded on location in "Lip-Sync" or narrated to fit picture.

**PLUG-IN PREAMPLIFIERS** mounted on rack panel cradle. Power switch, Fuse and Pilot light on front of panel. Zero level, 600 ohm, balanced line output.



**INDIVIDUAL DRIVE MOTORS** with positive gear interlock assure absolute "sync" from dead start. Separate synchronous drive motors operate each dubber independently to assure optimum motion stability.

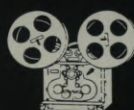
Send for complete specifications, prices and delivery schedule.

### DEALERS

NEW YORK—Camera Equipment Co., 1600 Broadway, New York  
19. JUdson 6-1420. Cable Address CINEQUIP.  
CHICAGO—Zenith Cinema Service, Inc., 3252 Foster Ave.,  
Chicago 25, Ill. IRVing 8-2104.

SAN FRANCISCO—Brooks Camera Co., 45 Kearney St., San  
Francisco, Calif. EXbrook 2-7348.  
CANADA—Alex L. Clark, Ltd., 3745 Bloor St., Toronto 18,  
Ontario. BElmont 1-3303.

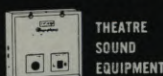
### AMERICA'S LEADING MANUFACTURER OF MAGNETIC FILM RECORDING AND REPRODUCING DEVICES



PORTABLE  
FILM RECORDERS



MICROPHONE MIXERS



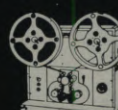
THEATRE  
SOUND  
EQUIPMENT



3-CHANNEL  
REPRODUCERS



MULTI-CHANNEL  
INTERLOCKED DUBBERS



STUDIO DUBBERS  
and RECORDERS

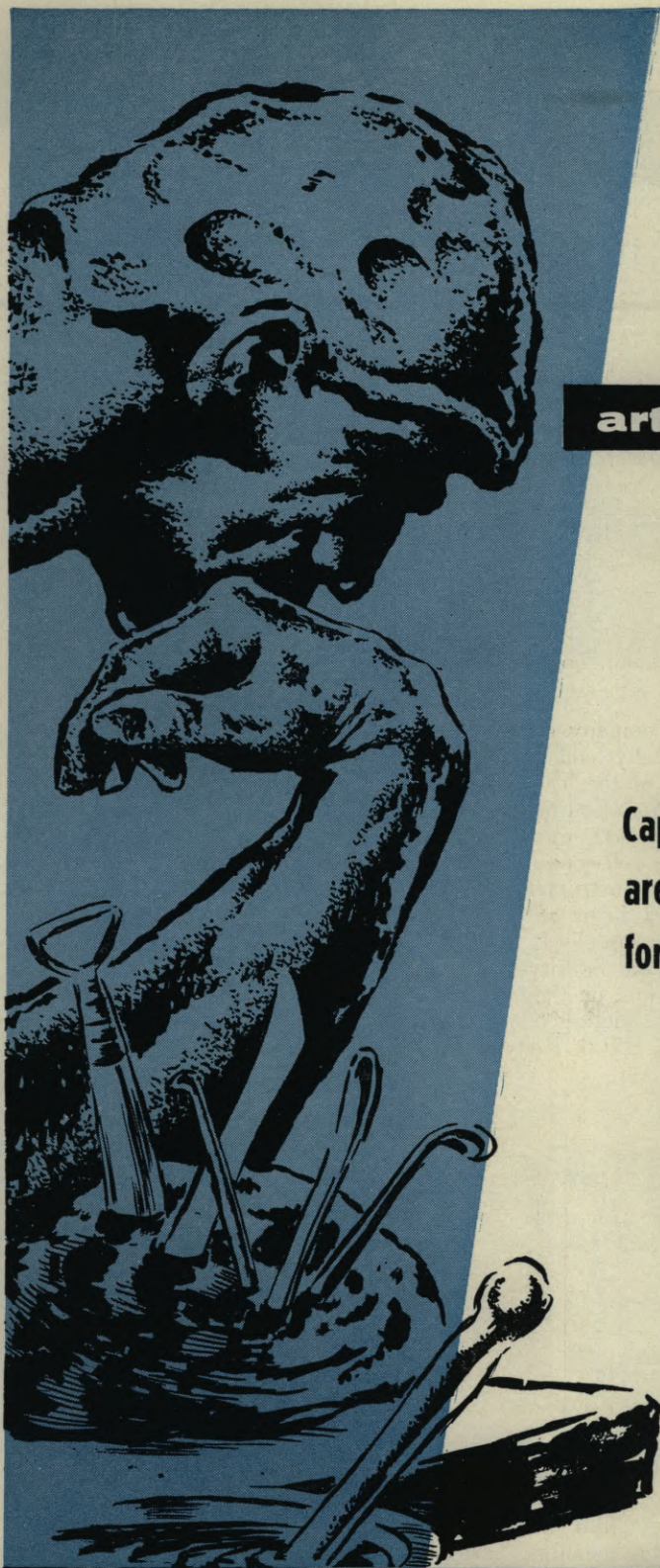


QUALITY AMPLIFIERS for  
MAGNETIC RECORDING and REPRODUCTION



MAGNASYNC MANUFACTURING CO., LTD. • 5521 SATSUMA AVE., NORTH HOLLYWOOD, CALIF. • POplar 6-1692





**without tools,**

**art is helpless . . .**

**Capital skills  
are your tools  
for finer films**

Capital Film Laboratories  
offers to the creative producer  
the finest motion picture laboratory equipment  
plus the priceless ingredient . . .  
the personal attention  
of our select staff of skilled craftsmen.

**PRINTS BY CAPITAL**



**CAPITAL**  
**FILM LABORATORIES, INC.**

1905 Fairview Ave., N.E., Washington 2, D.C.  
Telephone Lawrence 6-4634

Editing

Processing

Printing

RCA Sound Recording

Service Studios



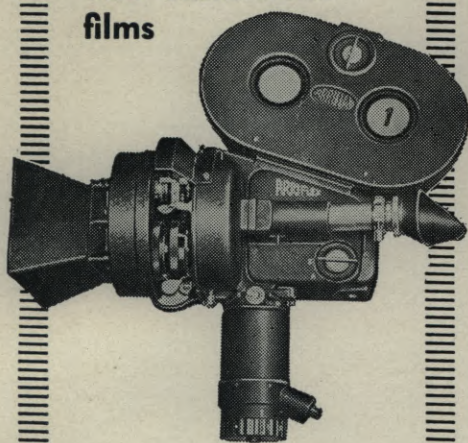
# ARRIFLEX

New 35 mm Model 2A

With 180° Shutter

**A TRULY GREAT  
CAMERA**

for TV, Newsreel  
and commercial  
films



For tough and trying assignments, ARRIFLEX 35 is in a class by itself. Reflex focusing through photographing lens while camera is operating—this is just one outstanding ARRIFLEX feature.

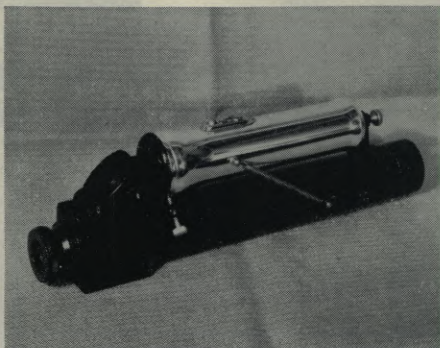
Equipped with bright, right-side-up image finder,  $6\frac{1}{2} \times$  magnification. Solves all parallax problems. 3 lens turret. Variable speed motor built into handle operates from lightweight battery. Tachometer registering from 0 to 50 frames per second. Compact, lightweight for either tripod or hand-held filming. Takes 200' or 400' magazine. Write for free folder.

Blimp now available.  
16mm ARRIFLEX also available.



# WHAT'S NEW

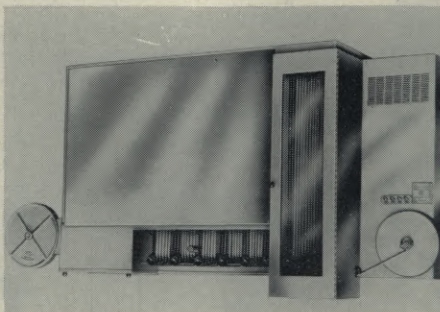
... in equipment, accessories, service



## Auto-Collimator

Benjamin Berg Company, 1410 No. Van Ness Avenue, Hollywood 28, Calif., is U. S. distributor of the Taylor-Hobson Camera Focus Auto-Collimator. Device enables the camera operator to carry, as an entirely self-contained and self-checking unit, an instrument to set the camera lens in a focus at infinity. Thus any cameraman can check, instantly, the accuracy of the infinity scaling of any lens in use, right on the camera, without the need of shooting test films.

Net price is \$375, F.O.B. Hollywood.



## All-purpose Processor

S.O.S. Cinema Supply Corp., 602 West 52nd St., N. Y., announces a new all-purpose automatic film developing and reversal processing machine. Trade-named the Bridgamatic, Jr., Type RA, it takes the new pre-hardened emulsions, including Eastman Tri-X reversal.

Unit features a variable speed control allowing changes in developing time from  $1\frac{1}{2}$  to 12 minutes, and will process at the rate of 1200 ft. per hour at normal temperature, according to the manufacturer.

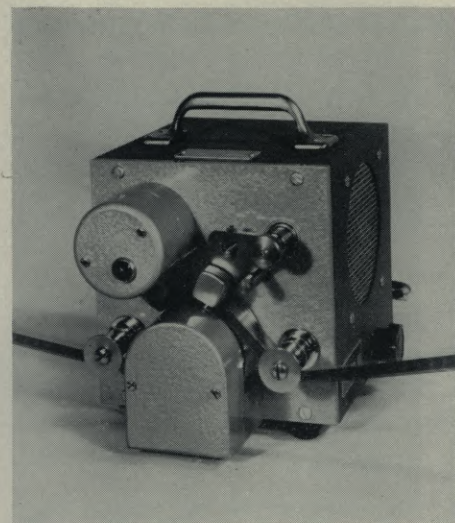
A time payment plan is being offered with trade-ins of professional equipment accepted as down payments. For complete information on the 14 varieties of

Bridgamatic machines, write the manufacturer direct. Prices start at \$1095.00.

## Fast Film Filter

Eastman Kodak Company, Rochester, N. Y., has introduced a new neutral density filter which minimizes or reduces amount of light reaching the film when high-speed films such as Tri-X are used. The light reduction is equivalent to three lens stops.

New filter will be known as the Kodak ND-3 and will be available in three Series sizes for use with Kodak Combination Lens Attachments.



## Optical-Magnetic Reader

Pictured above is Precision Laboratories' Model 800, Series RL, precision Optical-Magnetic Sound Reader, designed for editing either variable area or density optical tracks or 16mm, 35mm or  $\frac{1}{4}$ -inch magnetic tracks.

Sound is "read" by placing film with sound track on reader with track facing operator. Self-contained is a 4-watt high-gain amplifier, which operates the 117-V, 60 cycle AC heavy duty Alnico-V speaker.

More complete details may be had by writing the manufacturer at 1139 Utica Ave., Brooklyn 3, N. Y.

## Automatic Rewind

O'Dell Industries, Inc., 3975 Lake Michigan Drive, Grand Rapids, Mich.

(Continued on Page 570)



# The Hemispherical Ball-Joint Head

## AN EXCLUSIVE FEATURE OF THE NEW ARRI 16 TRIPOD

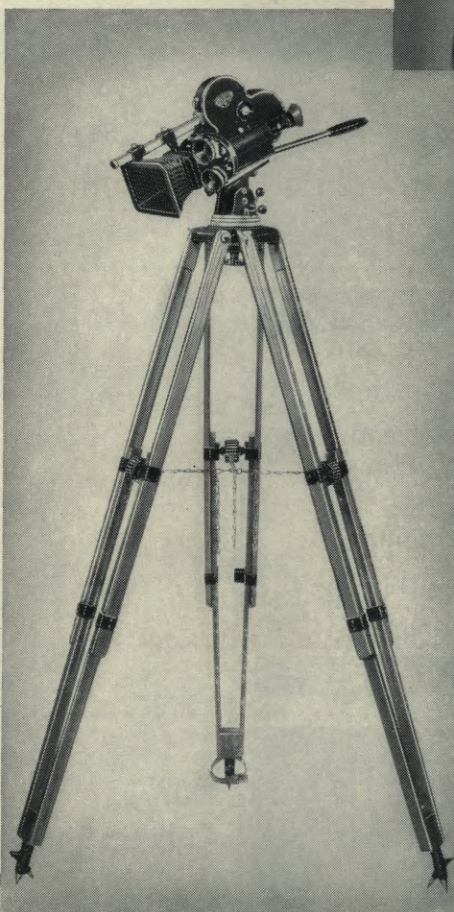
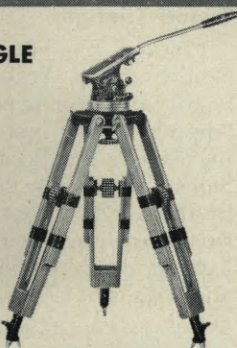
Here's the kind of tripod you'd expect from the maker of the famous Arriflex cameras — a tripod with the most advanced features in the field.

One outstanding Arri-exclusive is the Hemispherical Ball-Joint Head. No matter how uneven the ground or how tilted the tripod — this head permits you to level your camera without touching the tripod legs. And a built-in spirit level tells you when you're 'set'.

FOR LOW ANGLE  
SHOOTING . . .

### ARRI 16 SHORTY

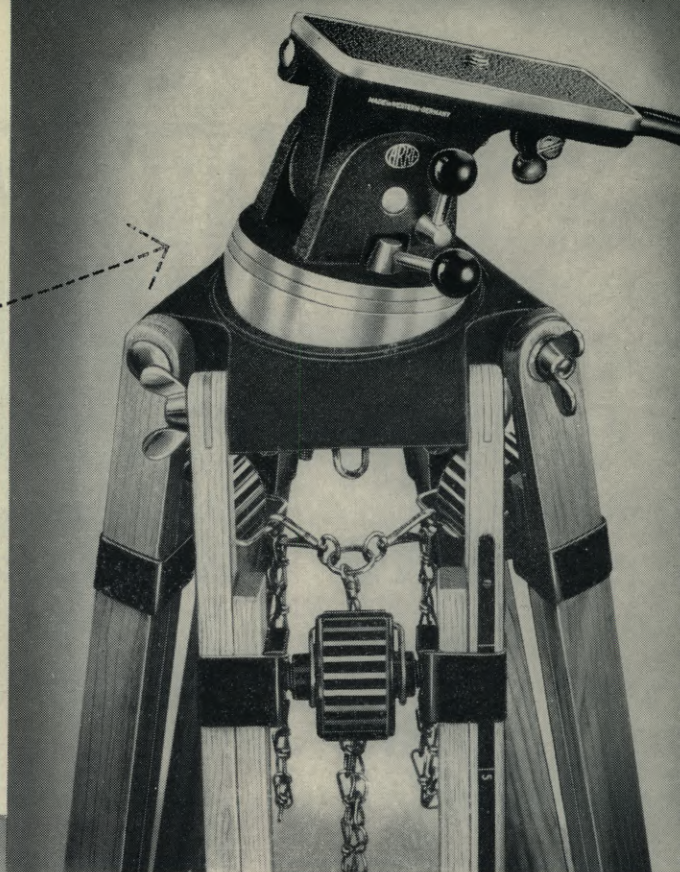
Supplied less head. Uses Hemispherical Ball-Joint Head interchangeably with Arri 16 Tripod.



#### SPECIFICATIONS:

	ARRI 16 TRIPOD	ARRI 16 SHORTY
WEIGHT	13½ lbs.	8½ lbs. less head
WORKING HEIGHT		
Maximum	65 inches	21 inches
Minimum	15 inches	9 inches
CLOSED	42 inches	22½ inches
PRICE	\$175.00 complete	\$90.00 less head

NOTE: Prices, Weights and Measurements include Head, except where otherwise stated, and are subject to change.



### THE ARRI 16 TRIPOD

Also gives you these important features:

- **HEMISPHERICAL BALL-JOINT HEAD** — precision-machined ball-and-socket (4½" diam.) perfectly mated for easy adjustment and secure locking action.
- **PAN and TILT LOCKS** — each controlled independently.
- **ADJUSTABLE PAN HANDLE** — conveniently located for optimum leverage — can be held under armpit leaving hands free to manipulate lenses and camera.
- **SMOOTH PAN and TILT MOVEMENTS** — achieved through precise machining of all metal parts.
- **SPIRIT LEVEL** — for lining up camera.
- **PATENTED TRIPOD SCREW** — fits both foreign and American tripod sockets. Outside thread section is for foreign cameras. When used with American cameras, it retracts, and inner "American thread" engages camera.
- **SINGLE LOCK COLLAR** — securely locks each leg at desired extension and automatically equalizes locking pressure on both shanks.
- **CALIBRATED LEG SCALES** — permit quick and easy setting of all legs to same extension.
- **ADJUSTABLE ANTI-SLIP CHAINS** — restrict leg spread and prevent tripod from falling.
- **TIE-DOWN EYELETS** — for securing tripod to floor.
- **TIE-DOWN LIPS** — for attaching to dolly or clamps.
- **DUAL SPURS** — double, hardened steel tips assure firm, sure footing.
- **CONSTRUCTION** — legs made of seasoned beech for extra strength and sturdiness. Metal parts are made of brass, steel and aluminum — exposed surfaces finished in black crinkle and chrome. Camera platform is leather-covered.

**KLING PHOTO CORP.**

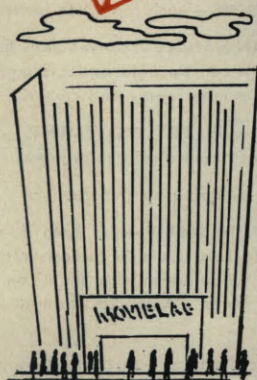
235 Fourth Ave., New York 3, N. Y.  
7303 Melrose Ave., Hollywood 46, Cal.



**in  
the  
East**  
it's...

**QUALITY**  
is our business  
*Plus*  
personalized  
service

**MOVIELAB**



**ROUND-THE-CLOCK SERVICES**

Negative Developing  
First Print Department  
Ultra Violet and  
Flash Patch Printing  
16mm and 35mm  
Release Printing  
Kodachrome Printing  
63 Editing Rooms

**SPECIAL TV SERVICES**

**For Color it's**

*Rainbowlab* Inc.

**Now  
Celebrating  
Our 25th  
Anniversary**

**MOVIELAB FILM LABORATORIES, INC.**

619 West 54th Street, New York 19, N. Y. JUdson 6-0360

**WHAT'S NEW**

(Continued from Page 568)

offer the O'Dell-O-Matic automatic re-wind unit for 8mm and 16mm movie projectors. Device completely eliminates the nuisance of rewinding movie film after each screening. It rewinds the film automatically as it is being projected. List price is \$19.95.



**4-Lamp Light Bar**

Eastman Kodak Company, Rochester, N. Y., introduced last month a new 4-lamp light bar for motion picture photography. The unit is recommended for use by movie amateurs as well as TV, industrial and educational film makers, since it provides far greater effective light coverage than has heretofore been provided by 2-lamp light bars.

The four lamps will give sufficient light for shooting motion pictures with Kodachrome film at distances up to 18 feet, using a stop of f/1.9.

Two switches incorporated in the bar permit using only two of the four lamps when making closeups.

Unit, which is tradenamed the Brownie 4-Lamp Movie Light, is readily usable with most movie cameras, 8mm or 16mm, that are equipped with a standard tripod socket. List price is \$8.45.

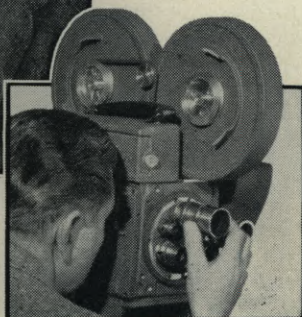
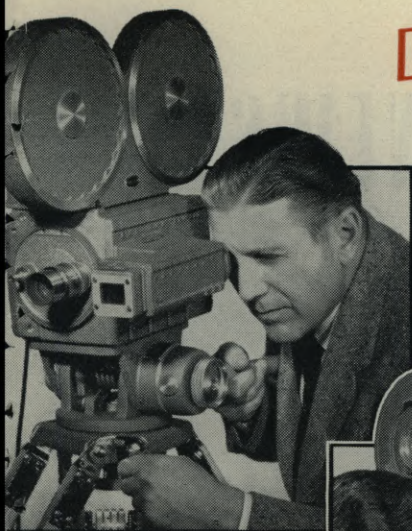
**Tripod Triangle**

Cinekad Engineering Co., 500 West 52nd St., New York, announces a new type triangle for tripods, which features "deep-hole" leg nests, and special locking devices that secure legs to triangle. Salient feature is the mobility offered by three 3-inch heavy-duty rubber-tired swivel casters, each equipped with a locking device. Triangle folds readily and weighs but 7 lbs. Literature is available.

(Continued on Page 616)



**Auricon**  
Hollywood



↑  
"Auricon Pro-600"  
with Single-Lens "C" Mount,  
Tele-Finder Objective, plus  
Standard Auricon Finder.

↑  
"Auricon Pro-600"  
with Critical Ground-Glass Focussing,  
available on 3-Lens Turret Model.



# Announcing

## THE ALL NEW

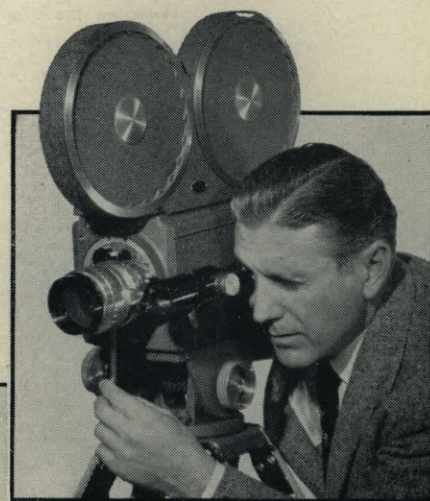
### "AURICON PRO-600" for 16mm optical sound-on-film

- ★ Self-blipped for completely quiet studio operation. The whisper-quiet film flow of The "Auricon Pro-600" is silent proof of precision design. Your sound-recording microphone never picks up "Pro-600" Camera noise!
- ★ 600 ft. film Magazines with Auricon-Electromatic Take-up, for 16 minutes of continuous "Talking-Picture" filming.
- ★ Synchronous Motor Drive for "Single-System" or "Double-System" Recording.
- ★ \$1,497.00 list... for Auricon Pro-600 "Double-System" professional picture-camera with built-in features. Also available at added cost is "Single-System" equipment for Optical Sound-Track-On-Film, "C-mount" Lenses, View-Finders, Film Magazines, 3-Lens Turret, Critical Ground-Glass Focusing, Lens Sun-Shades, Tele-Finders, etc...
- ★ Sold with 30 day money-back guarantee, you must be satisfied!

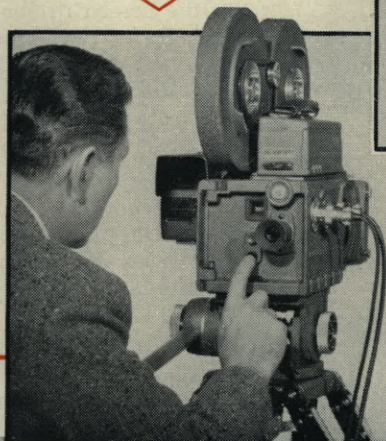
Write for free illustrated "Auricon Pro-600" literature and price schedule.

**Auricon**  
Hollywood

↓  
"Auricon Pro-600"  
features Push-Button "On-Off,"  
with safety-interlocked  
film-flow mechanism.



↑  
"Auricon Pro-600"  
Turret Model with  
"Zoom" type Lens  
and Finder in use.



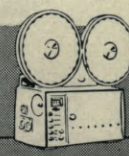
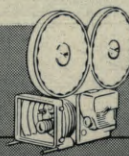
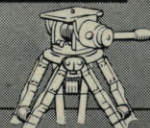
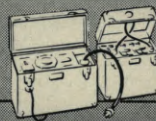
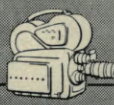
**Auricon**

A PRODUCT OF

**BERNDT-BACH, INC.**

6902 Romaine Street, Hollywood 38, California

MANUFACTURERS OF SOUND-ON-FILM





# ONE CAMERA

16mm or 35mm

in 10 SECONDS!

## Camerette 16/35

Reflex Motion Picture Camera

The perfect camera for the motion picture film maker working in both 16mm or 35mm color or black and white.

### LOOK AT THESE ADVANTAGES—

- The same lenses, same motor drives, same sound blimp and accessory equipment used for both 16mm or 35mm — to convert simply change the magazine.
- Precise rugged movement
- Reflex viewing
- 200 degree adjustable shutter
- Divergent three lens turret
- Automatic film gate 400' magazines 16 or 35mm — the 16mm magazine will accommodate daylight spools as well as standard core load.
- Light weight — only 14 pounds with 3 lenses, 400' magazine, and 6/8 volt motor.

Write for brochure



**amarette**

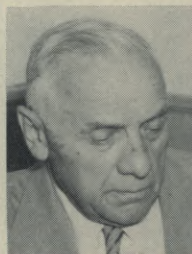
patents coutant-mathot

Manufactured by Ets. Cine. Eclair, Paris



# INDUSTRY NEWS

Players, directors and cameramen, still living, who made distinctive contributions to the American Cinema within the memorable "silent" era from 1915 to 1925 are to be honored in ceremonies planned for November 19th in Rochester, New York.



Jack Rose

The event, The George Eastman House Festival of Film Artists, is an undertaking of the George Eastman House memorial. One of the industry's most notable figures, Jesse L. Lasky, is serving as the chairman. Serving on his committee as representative of industry cameramen is Jackson J. Rose, A.S.C.

Rose, veteran Hollywood cinematographer, is ideally suited to the task in view of his early-day Hollywood experiences and his vast library of memorabilia on the industry and its personnel.

It has been Rose's task in recent weeks to research existing records and compile a list of the outstanding cameramen of the 1915-1925 era. Aiding him also is the fact that he is personally acquainted with most of the cameramen who have served Hollywood studios for more than four decades.

Similar research and evaluation is being done by committeemen representing actors, actresses, and directors.

The twenty artists to be honored will be chosen by ballots which will be mailed to the known cameramen, players and directors whose names are submitted to Eastman House by the committee.

In addition to Jesse Lasky and Jackson Rose, others aiding in the project are screen producer Carey Wilson, serving as Vice Chairman and representing the Screen Producer's Guild; Jack Mullah, for the Screen Actor's Guild; and Frank Borzage, the Screen Director's Guild.

Aiding the Eastman House Staff, under the direction of General O. N. Solbert, will be Richard Griffith of Museum of Modern Art; W. Ward Marsh, film critic of the Cleveland Plain Dealer, and James Card, Curator of Motion Pictures at Eastman House.

Cinepanoramic, French anamorphic lens described in American Cinematographer for September, 1953, is being

used by Republic Studio in the production of wide-screen pictures of the CinemaScope type.

Films shot with the Cinepanoramic lens can be projected through Panavision, CinemaScope, Superscope or other anamorphic projection lenses.

The Cinepanoramic lens is an "attachment" type anamorphic lens, being mounted before the regular camera lens in photography.

Republic's first Cinepanoramic feature will be "The Maverick Queen," starring Barry Sullivan, Scott Brady and Barbara Stanwyck. Jack Marta is doing the photography.

A new industry award for outstanding technical contributions to color motion pictures was announced by Dr. John G. Frayne, President of the SMPTE at the Awards Session of the Society's convention in Lake Placid early this month. It was announced that the new award, to be called the Dr. Herbert T. Kalmus Gold Medal Award, would be presented first in 1956.

It is the opinion of the SMPTE that color has achieved a position of such prominence and stature in the technology of motion pictures that major contributors to its scientific progress should be recognized and honored.

Du Pont's "paper-thin" motion picture film base, "Cronar," came a step nearer reality last month with the start of production of the polyester film base at Du Pont's new plant at Parlin, New Jersey. Start-up of the plant comes after eight years of research and development costing more than \$6 million and after approximately two years of construction.

After several weeks of run-in operation, the plant will begin continuous production of Cronar film base, to be coated first with DuPont graphic arts photographic emulsions.

Motion picture products have next priority, and it is likely that most other Du Pont photographic film products will be converted to the thin-but-tough polyester base as production capacity permits.

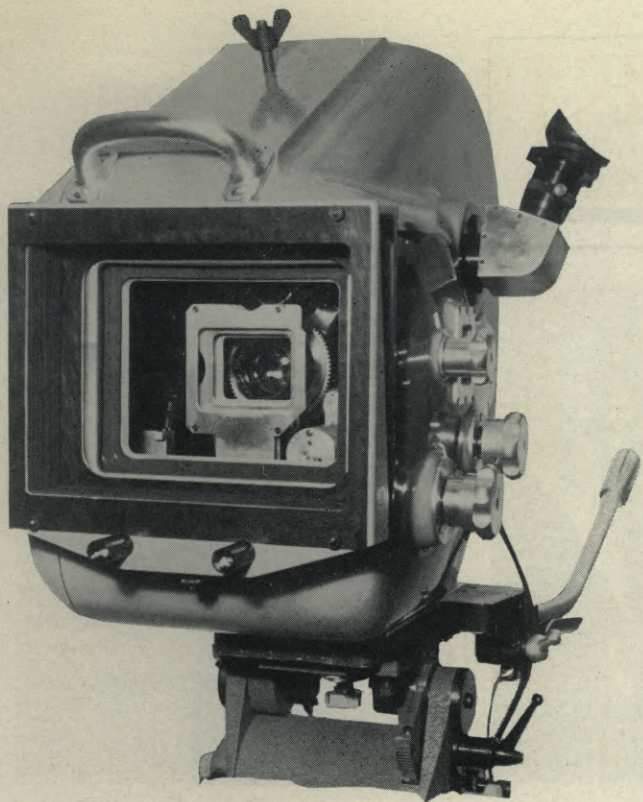
Cronar, produced from a pilot plant during the past three years, has shown considerably better durability and dimensional stability than any other film base, say Du Pont engineers.



# CAMERETTE

*Now Available with Two  
Important New Features!*

- ★ Adapted for CinemaScope
- ★ Sound Blimp with Reflex Viewing



Now for the first time—a lightweight camera for CinemaScope photography—the 35mm Camerette with CinemaScope aperture, with full CinemaScope field visible through the reflex viewer. Auxiliary turret and matte for regular photography.

New magnesium alloy blimp with viewing through the taking lens at all times through the Camerette's reflex finder, making a lightweight, fully blimped combination 16mm or 35mm camera. Synchronous motors—110-v single phase, 220-v three phase.

## ONLY THE CAMERETTE HAS

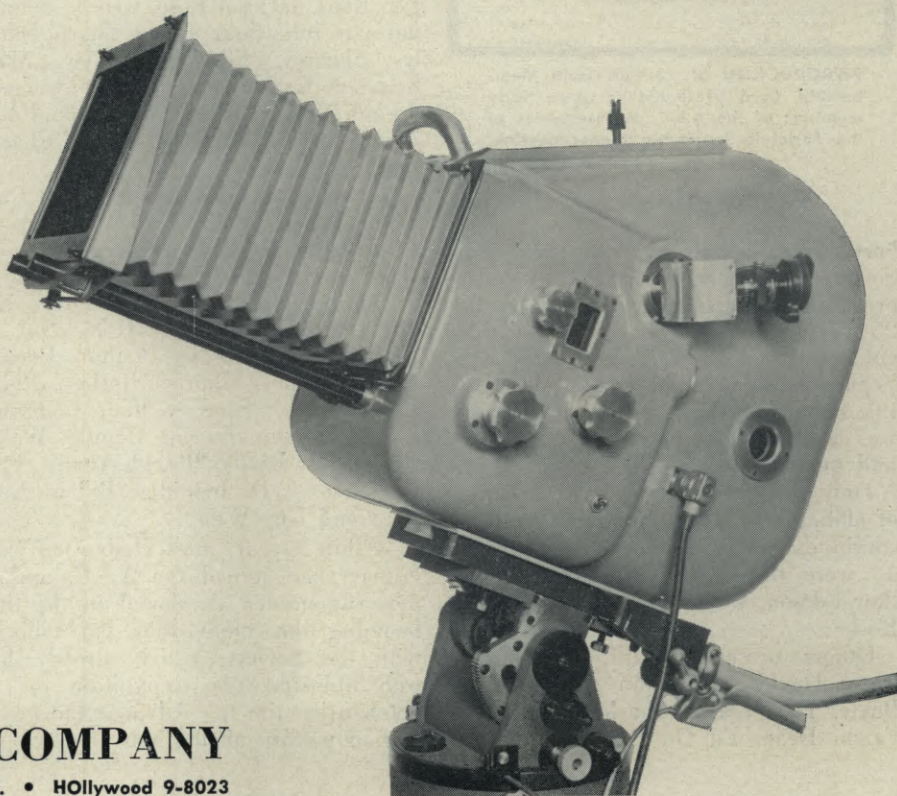
- 1 Ability to use both 16mm and 35mm film in one camera.
- 2 Reflex viewing through the taking lens at all times for both film sizes.
- 3 Sound blimp with reflex viewing, making a fully blimped, instantly interchangeable 16mm or 35mm camera.

Patents Coutant-Mathot  
Manufactured by Eclair, Paris

*Write for descriptive literature*

## BENJAMIN BERG COMPANY

1410 N. VAN NESS AVE. • HOLLYWOOD 28, CALIF. • HOLLYWOOD 9-8023





# Hollywood Bulletin Board



HARRY HALLENBERGER (left), for 28 years a member of the American Society of Cinematographers, receives the Society's 25-Year Gold Membership Card from A.S.C. President Arthur C. Miller at the Society's September monthly meeting, at which time more than forty A.S.C. members were so honored. At right, calling off the 25-year membership roster is Walter Strenge.



RAY JUNE (left), who also received a 25-Year Gold Membership Card, looks over copies of the Society's "1930 Cinematographic Annual" and reminisces on the "good old days" of Hollywood picture making with A.S.C. Associate Sid Solow. Latter is V-president and General Manager of Consolidated Film Industries' Hollywood Lab.



REPRODUCTION of 25-Year Gold Membership Card presented to some forty members of the A.S.C. in ceremonies at the Society's September dinner-meeting.

Elmer Dyer, George Folsey, Alfred Gilks, Ernest Haller, Harry Hallenberger, Fred Jackman, G. Floyd Jackman, Ray June, Glenn Kershner, H. F. Koenekamp, Charles Lang, Arthur C. Miller, Hal Mohr, Ira Morgan, Ernest Palmer.

Sol Polito, Harry Perry, Paul Perry, Len Roos, Jackson Rose, George Schneiderman, John Seitz, Henry Sharp, Douglas Shearer, Edward Snyder, Mack Stengler, Karl Struss, James Van Trees, Joseph Walker, Gilbert Warrenton, Frank Zucker, Charles Herbert, and Charles Bell.

Terms of membership for Gold Card members range from 25 to 36 years with Edeson, Milner and Rosher exclusively in the 36-year bracket.

The Society, now in its thirty-sixth year, was founded in Hollywood on January 8, 1919 by Arthur Edeson, Victor Milner, Charles Rosher, Philip Rosen, Homer Scott, William C. Foster, L. D. Clawson, Eugene Gaudio, Walter Griffin, Roy Klaffki, Joseph August, Fred Granville, J. D. Jennings, Robert Newhard and Guy Wilky.

Within a year, most Hollywood cameramen had joined the A.S.C. and as new cameramen developed in the then booming film colony, they, too, affiliated with the Society, which already had won industry-wide recognition for its noteworthy aim to "Advance the art of motion picture photography."

The A.S.C. last month elected to Active membership Ed Hyland, and Zoli Vidor, New York directors of photography.

Hyland is presently a free-lance cameraman with a record of more than thirty years in the motion picture industry. His career began at the old Paramount Studio in Long Island City

(Continued on Page 576)



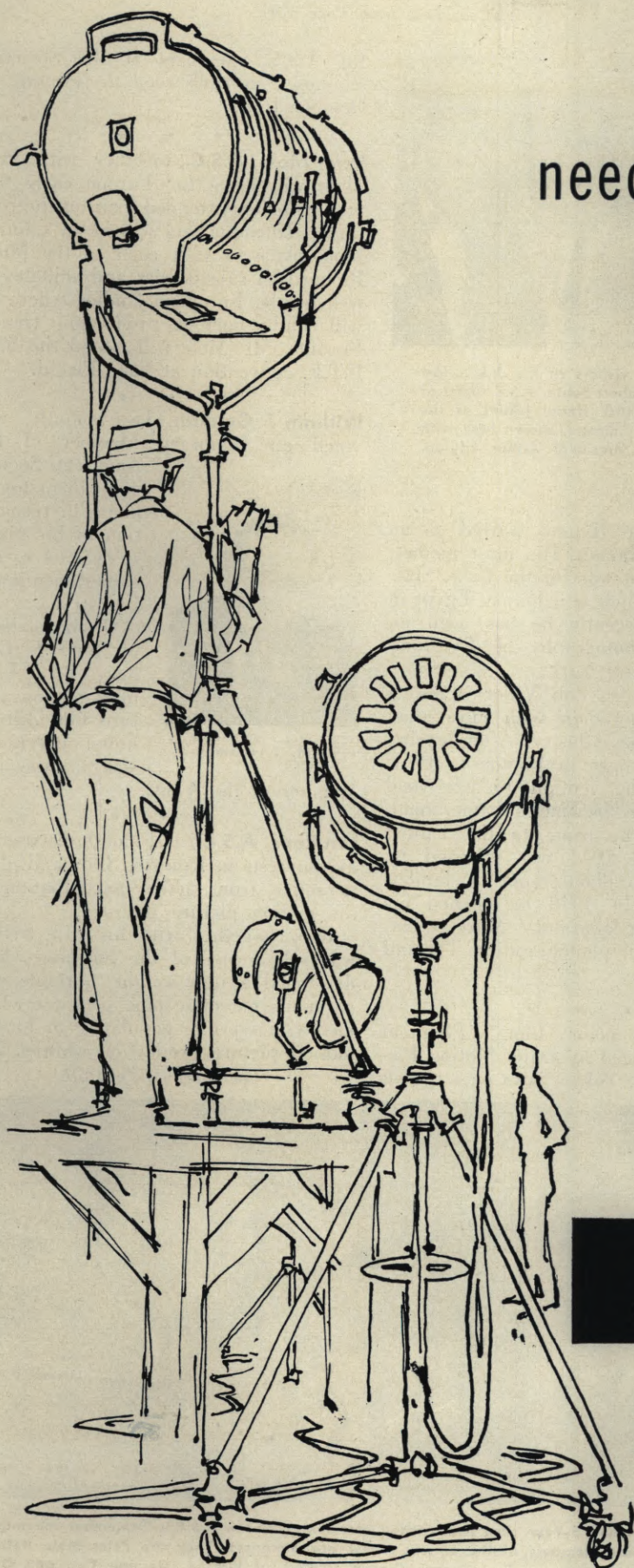
WILLIAM SNYDER, A.S.C. (right) last month was presented with a scroll from Nat'l Society of Magazine Photographers for "outstanding excellence of his photography of the Grainger-R.K.O. production, "The Treasure of Pancho Villa." Making presentation was NSMP West Coast Chairman Fred Swartz.

**Forty-three** members of the American Society of Cinematographers with records of membership in the Society for 25 years or more were honored with gold membership cards at the Society's September meeting in Hollywood. Paying tribute to the Gold Card members was a record turn-out of 110 members and guests.

Only those members whose 25 years of affiliation with the Society have been continuous were so honored. Among the 43 were three Charter Members—Arthur Edeson, Victor Milner, and Charles Rosher.

Others presented with Gold Cards were: David Abel, John Arnold, John Boyle, Dan Clark, Charles G. Clarke, Faxon Dean, Ed Du Par.





## need location lighting... fast?

*Call on Jack Frost, one of the  
nation's largest suppliers of  
temporary lighting facilities.*

Wherever you are, whatever your lighting needs, you can depend on Jack Frost's expert handling and complete range of equipment, from a 100 watt inkie to 225 amp arc with mobile power plants. In the studio too, we can supplement your present equipment to meet any situation, anywhere. We've been doing it for years for many of the top shows.

Our service includes complete installation and removal at one low cost.

### **free estimates**

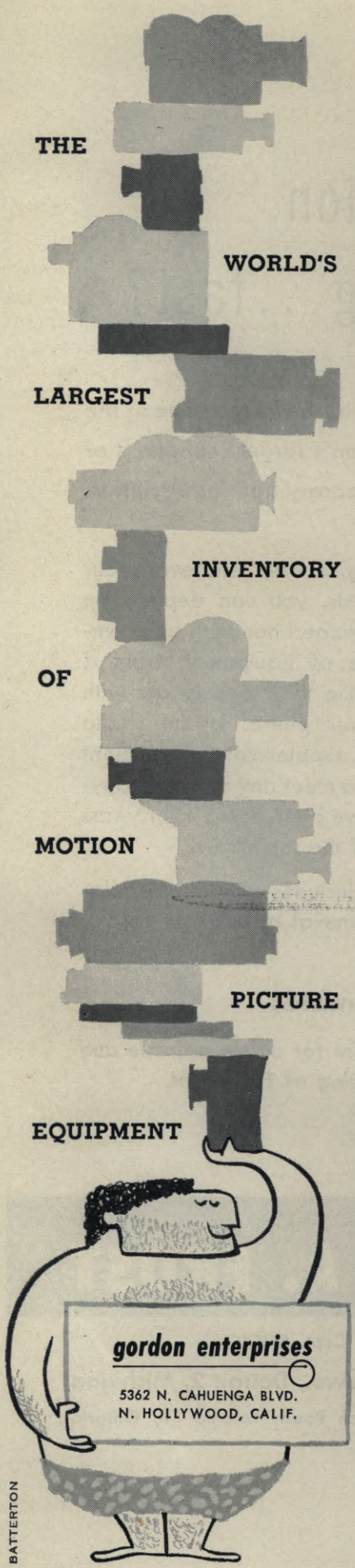
*Write or wire for a free estimate and  
a Free Catalog of Equipment.*

# **JACK A. FROST**

Dept. AMCI

**234 Piquette Ave., Detroit 2, Michigan**  
425 Burnamthorpe Road, Toronto 18, Ontario

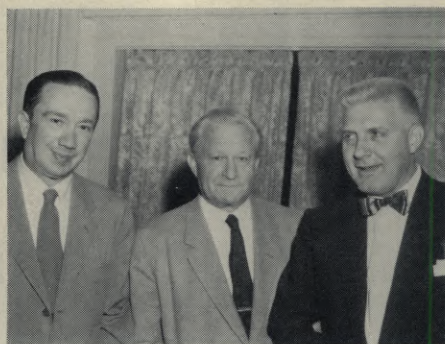




BATTERTON

# HOLLYWOOD BULLETIN BOARD

(Continued from Page 574)



"FIRST TIME" visitors at the A.S.C. last month were Robert Sable, A.S.C. (left) of Chicago and Dick Hertel (right) of the Kling Studios, Chicago, shown here with former A.S.C. president Arthur Edeson.

in 1925 where Hyland started as an assistant cameraman. His most memorable assignment was for the U. S. State Department which sent him to Egypt in 1951. More recently he has been directing the photography of TV films produced in New York.

Hungarian-born Zoli Vidor is also a free-lance cameraman with more than 24 years in the industry. After leaving engineering college in Vienna in 1931, he entered the motion picture field where he soon became a cameraman. Subsequently he came to the United States and in 1944 was engaged by George Pal to photograph his famous Puppetoones. In 1948 he opened his own animation laboratory. More recently he has been photographing TV and industrial films.

The Japanese color film, "Phantom Horse," produced by Daiei Motion Picture Company, Tokyo, is to be screened

for A.S.C. members at the Society's clubhouse in Hollywood the evening of October 10th.

Peter Mole, A.S.C., together with Mrs. Mole will leave for Europe early this month for an extended visit on the continent. Headquarters will be at Cannes. Mole plans to visit each of the Mole-Richardson subsidiaries and affiliates as well as the European studios where he will study current production trends. Enroute, Mr. Mole will attend the S.M. P.T.E. convention at Lake Placid.

William J. German, last month was voted an Honorary Member of the



Wm. J. German

American Society of Cinematographers in recognition of his many services to the cameramen in the industry.

German, head of Wm. J. German, Inc., Eastman motion picture film distributors, previously was an Associate

Member of the A.S.C.

Len Roos, A.S.C., last month disposed of his interests in Kinevox, Inc., and plans to retire from active participation in the motion picture industry.

Roos, together with his wife Sylvia, was sole owner of the business which developed a light-weight, portable synchronous magnetic tape recorder which met with especial popularity in foreign motion picture production centers. The

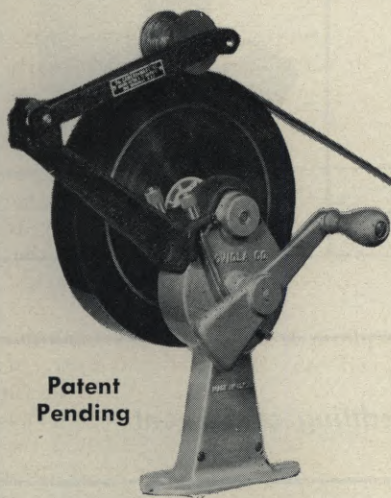
(Continued on Page 616)



FOLLOWING the 25-Year card presentation ceremonies at the A.S.C.'s September meeting, three Associate Members of the Society renew acquaintances. They are Peter Mole (left), Pres. of Mole-Richardson Co., George Gibson (center) of Wm. J. German Co., and Dr. Norwood Simmons, Eastman Kodak Co. Here Mole is probably telling of his forthcoming trip to Europe this month.



OCTOBER IS OPEN SEASON TO  
**BUY • SELL • TRADE**  
 MOTION PICTURE AND TV PRODUCTION EQUIPMENT



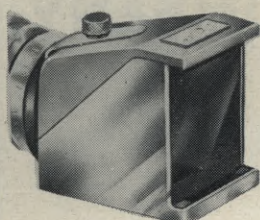
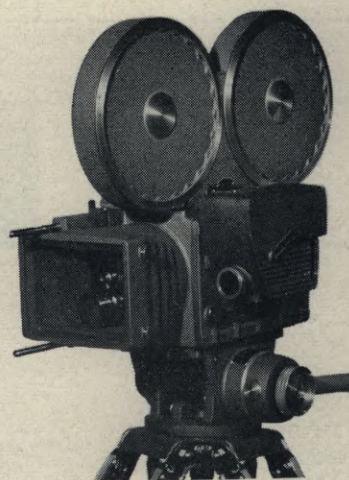
● CAMART TIGHTWIND ADAPTER

Modern film editors use the Camart Tightwind adapter to rewind 16mm and 35mm film on cores, prevents scratches and abrasions, winds the film smooth, tight, and even. Why take chances when you can protect your valuable film for a very small investment. Send for descriptive literature. Price: \$29.00, money back guarantee.

● AURICON PRO 600 CAMERA

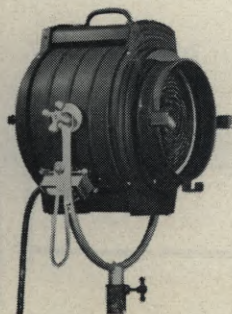
Auricon's latest development in sound-on-film cameras, now available for immediate delivery. Also a complete line of Super-1200 and Cine Voice single system cameras. Trades accepted.

TIME PAYMENTS ARRANGED.



● NEW WIDE SCREEN VISTASCOPE LENS

Now you can photograph and project 16mm pictures with a single Vistascope lens and get a picture that is twice as wide as it is high. Sharp definition for black and white and color. Only \$125.00.

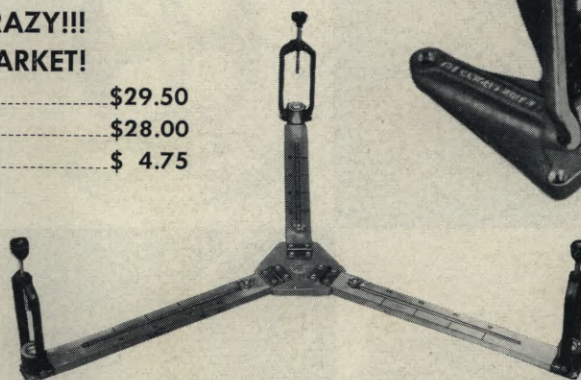


● BARDWELL-McALISTER LIGHTS

Complete stock of 750 watt to 5000 watt spotlights and accessories available for immediate delivery. Prices from \$81.00 and up.

● SELLING LIKE CRAZY!!!  
 BEST ON THE MARKET!

CAMART TRIANGLES ..... \$29.50  
 CAMART CAR-TOP CLAMPS ..... \$28.00  
 CAMART SLATE & CLAPSTICK ..... \$ 4.75



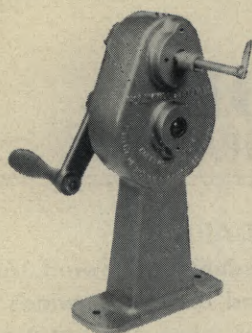
PROD. NO.		
DIRECTOR		
CAMERA		
SOUND	SCENE	TAKE
DATE		

THE **CAMERA • MART** INC.

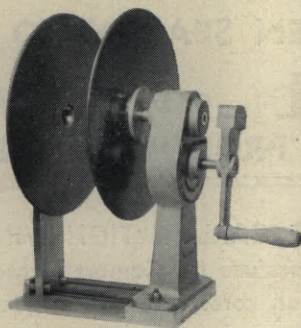
1845 BROADWAY at 60th ST.  
 NEW YORK 23, NEW YORK

PHONE: Circle 6-0930  
 CABLE: CAMERAMART

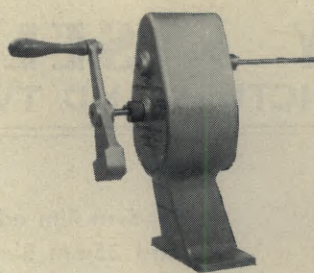




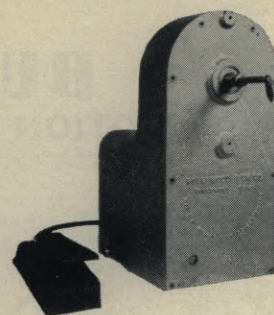
hand rewind



negative rewind set



differential rewind



power rewind

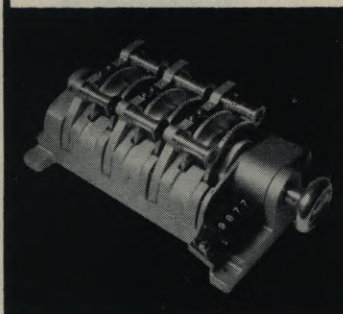


*precision film editing equipment*

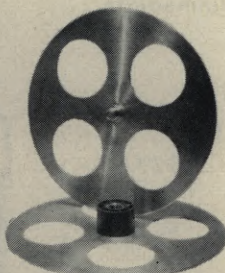
## HOLLYWOOD FILM COMPANY

HO 2-3284  
956 NO. SEWARD ST.  
HOLLYWOOD 38  
CALIFORNIA

synchronizer



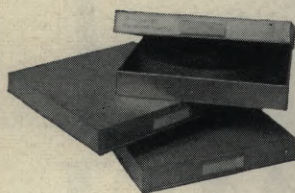
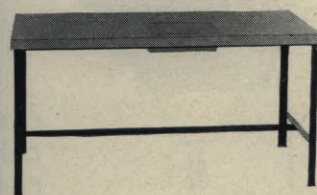
split reels



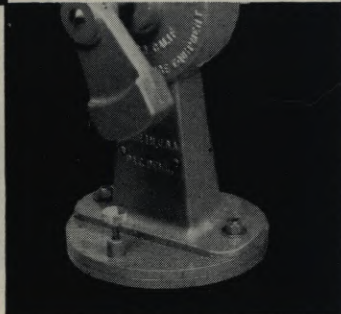
film racks



editing table



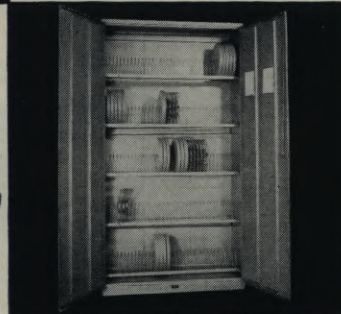
vault cans



swivel base



tightwind

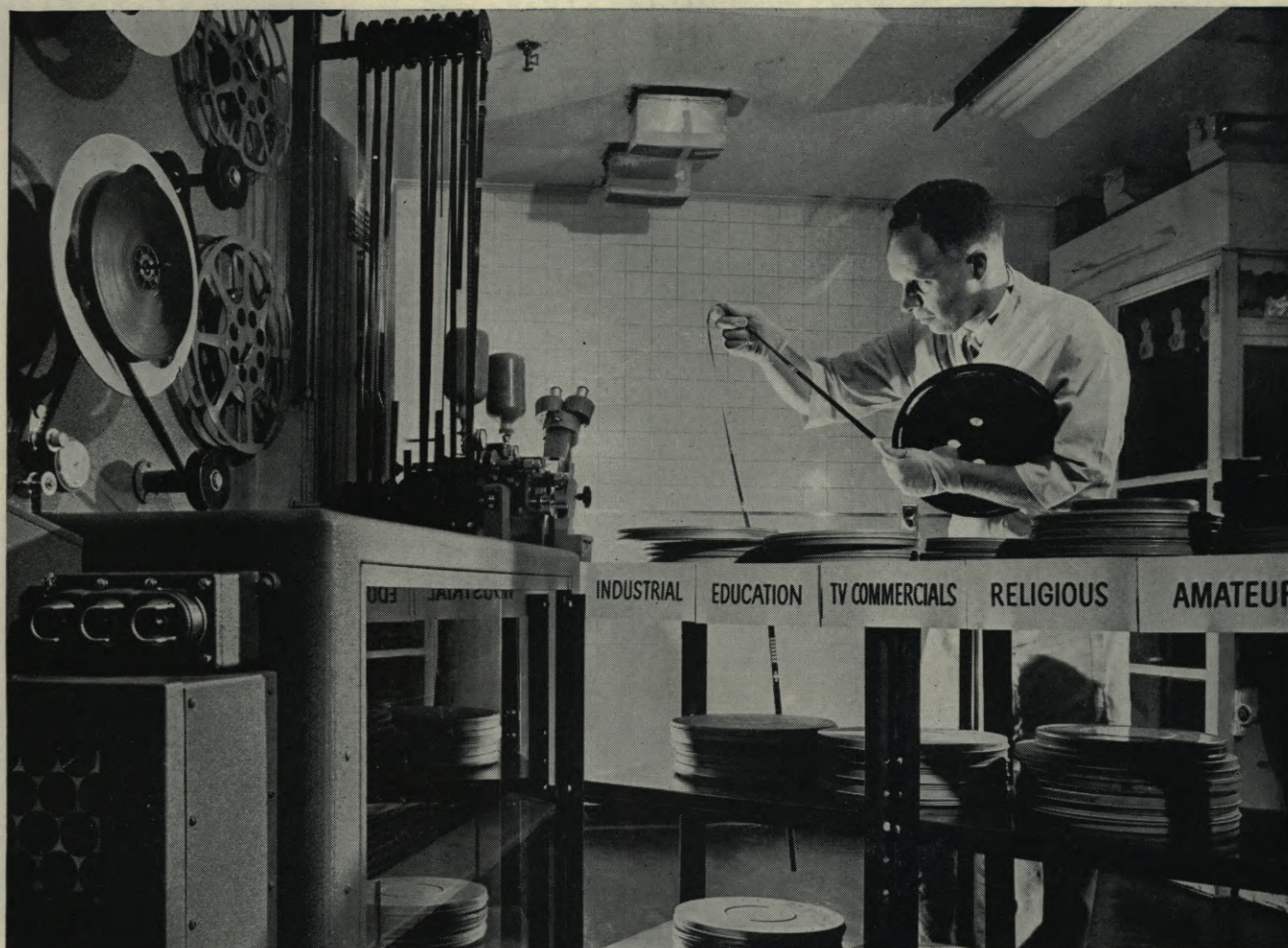


film storage cabinet



at better dealers everywhere





## NOW! These six laboratories offer fast magnetic Magna-Striping® for all 16mm films!

### **Byron Labs**

1226 Wisconsin Ave., Washington, D.C.

### **Colburn Labs**

164 N. Wacker Drive, Chicago 6, Illinois

### **Consolidated Film Industries, Inc.**

959 Seward Street, Hollywood 38, California

### **Animex**

Nieuwe Gracht 7, Haarlem, Holland

### **Sathaporn Cinema Co.**

2196 Tung Mahamek, Bangkok, Thailand

### **Reeves Soundcraft**

671 Hope St., Springdale, Conn.

Here's real striping. Striping that will never soften and come off because of projection lamp heat. Magna-Stripe has the original balancing stripe.

And more: Magna-Stripe is the only magnetic striping used on Cinemascope films produced by major Hollywood producers. Soundcraft won an "Oscar" for this process in 1953.

#### **Three sizes of Magna-Stripe are available:**

25-mil Magna-Stripe for double-perforated silent film

50-mil Magna-Stripe for both magnetic and photographic sound

100-mil Magna-Stripe for all-magnetic sound track

**FOR EVERY SOUND REASON**

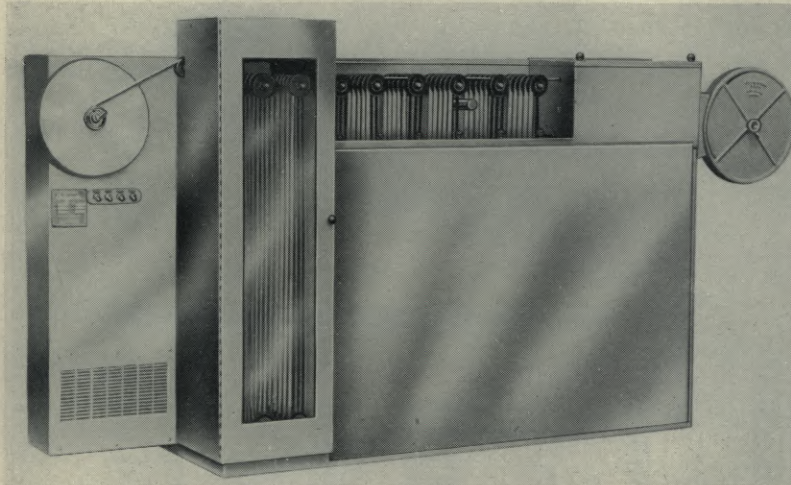
**REEVES SOUND CRAFT CORP.**

10 East 52nd Street, New York 22, N. Y.



# The One-Stop Source Of Supply

## The Profitable All-Purpose Film Processor



**BRIDGAMATIC JR. 16mm Automatic Reversal Developing Machine**—Ideal for TV Stations, Photo Finishers, Industrial or Documentary Producers, Universities, etc.

*Bridgomatic JR.*  
REVERSAL DEVELOPING MACHINE

BRIDGAMATIC JR. REVERSAL assures quality pictures in minutes—Spot news and sports events can be shown **immediately** after they occur. This is the perfect All-Purpose Processor at a price anyone can afford. Reversal speed 1000' per hour—also does negative and positive film. Light-Tight compartment for daylight operation—has 8 stainless steel tanks—completely automatic "Dry-to-Dry."

**MODEL R \$1995**—Includes basic Bridgomatic features such as overdrive, nylon bearings, air squeegee, built-in drybox, blower, heating elements, 400' enclosed magazine and daylight compartment.

**MODEL RA \$2495**—Same basic features of Model R plus continuously variable speed control, 1200 ft. enclosed magazine, feed-in and take-up elevators.

➔ **TAKE ADVANTAGE OF S.O.S. TIME-PAYMENT PLAN**  
Trade-ins Accepted . . . Send List.

## THE ANSWER TO ECONOMY IN ANIMATION

TEL-ANIMA tools for Top Techniques. Greatest dollar for dollar value in the industry!

### TEL-Animaprint

The first sensibly priced Hot Press Title Machine for high quality, fast lettering. Prints dry from colored foil for instant use. Acme pegs give perfect registration on paper or acetate cells.

### TEL-Animastand

A professional Animation Stand with accuracy guaranteed by Acme Peg Bar registration. Includes all basic movements—does everything the animator needs. Engineered to meet the most limited budget.

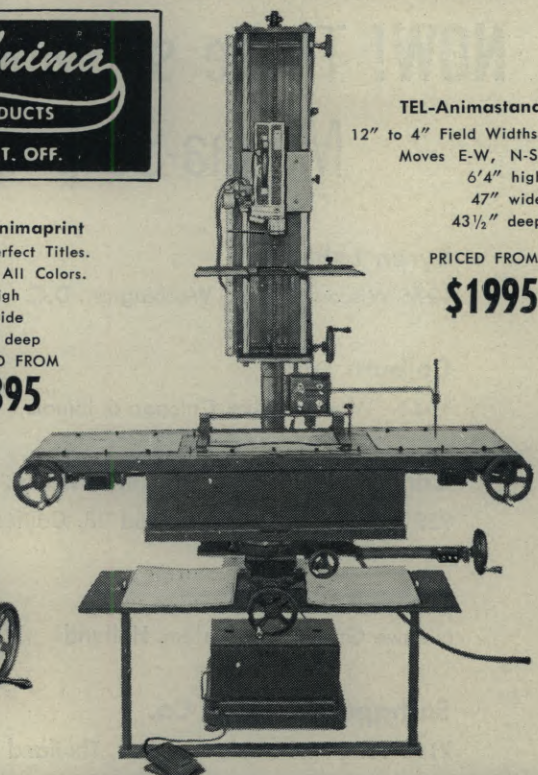
For MOTION PICTURE PRODUCERS, ANIMATORS, SPECIAL EFFECTS LABORATORIES, TV STATIONS, ADVERTISING AGENCIES, ETC.

Write for brochure

Manufactured and distributed exclusively by S.O.S.



**TEL-Animaprint**  
For Perfect Titles.  
Prints All Colors.  
25" high  
14" wide  
18½" deep  
PRICED FROM  
**\$395**



**TEL-Animastand**  
12" to 4" Field Widths.  
Moves E-W, N-S.  
6'4" high  
47" wide  
43½" deep

PRICED FROM  
**\$1995**

"The Department Store of the Motion Picture Industry"

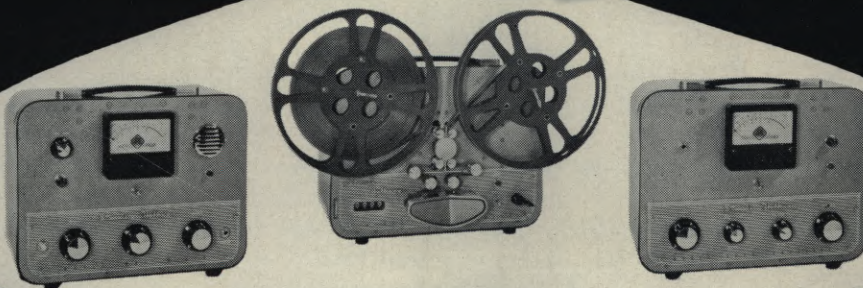
**S.O.S. CINEMA SUPPLY CORP.**

602 WEST 52nd ST., NEW YORK 19, N.Y.  
Phone: PLaza 7-0440 Cable: SOSOUND



BRANCH OFFICE: HOLLYWOOD, CALIF., 6331 Hollywood Blvd., HO 7-9202—For Other S.O.S. Offerings See Page 599





stancil-hoffman S6 system of magnetic film recording light-weight, standard AC or battery operation 16mm or 17.5mm.

**we've packaged a major studio**



**into a portable recording system**



**ECONOMICAL** . . . At last, a low cost, completely integrated, **PROFESSIONAL** magnetic film recording system for studio, portable, or mobile use . . . designed to accommodate any camera and meet your every quality and film recording requirement.

**VERSATILE** . . . Whatever the power source, camera, or utilization, a simple plug-in or interchange of motors is all that's ever required to operate the S6 system. Designed around 24 volt, precisely engineered, Air Force approved batteries. Accommodate 110 or 220 volts, 1 or 3 phase, 50 or 60 cycle power input.

**QUALITY** . . . Engineered by Stancil-Hoffman, manufacturers of equipment used throughout the world by film producers, radio and television stations, the Military, and nuclear research laboratories. Find out how the S6 magnetic film recording system for portable and fixed recording can best meet your requirements . . . send for specifications now! Credit terms arranged on domestic purchases.

manufacturers of complete recording system

**STANCIL-HOFFMAN CORP.**

from microphone to release print

921 N. HIGHLAND AVE., HOLLYWOOD 38, CALIF. TEL. HOLLYWOOD 4-7461

cable address: **STANHOFF**

representatives:

**New York & Eastern Seaboard**  
Electronics Assoc., Inc.  
200 5th Street, Stamford, Conn.

**S. W. Caldwell, Ltd.**  
447 Jarvis Street  
Toronto 5, Ontario, Canada

**East Central Section**  
Mr. Michael J. Cudahy  
5858 Sheridan Rd., Chicago 40, Ill.

**S. O. S. Recording**  
1545 South Beretania  
Honolulu 14, Hawaii

**West Central Section**  
W. Cozzens  
220 Kedzie St., Evanston, Ill.

**India & Pakistan**  
Photophone Equipments, Ltd.  
9, Marine Lines, Bombay, India





TAKING A NEW CinemaScope lens and larger negative 55.625mm in width is Twentieth Century-Fox's new 4X-55mm camera. Responsible for camera's development is Sol Halprin, A.S.C. (right),

studio's Executive Director of Photography, Grover Laube (left), studio engineer, and Earl Sponable, Chief Research Engineer of T. C. F. studio, not shown.

## CINEMASCOPE ON 55MM FILM

**Twentieth-Century-Fox studio builds completely new camera that takes negative 55:625mm in width, and launches a new era of CinemaScope production.**

By ARTHUR E. GAVIN

**W**HEN 20TH CENTURY-FOX took the \$60,000,000 gamble on CinemaScope two years ago, it was with the promise to the industry by Mr. Skouras and Mr. Zanuck that the studio would spare no expense in further improving the photography and exhibition of super-wide-screen CinemaScope motion pictures.

In recent weeks, another significant step has been taken by the studio, destined to further enhance the quality of

CinemaScope productions. This was the development of the Fox 4X-55mm camera. The "4X" symbolizes the four-times greater information-recording area of the 55mm wide negative which is used in the camera.

T.C.F.'s first CinemaScope production, "The Robe," was started when the studio possessed but a single French-made anamorphic lens. This lens was subsequently improved by



studio engineers and was known as an anamorphic "attachment" lens, because it was used in conjunction with the regular camera lens—ie., mounted in front of it.

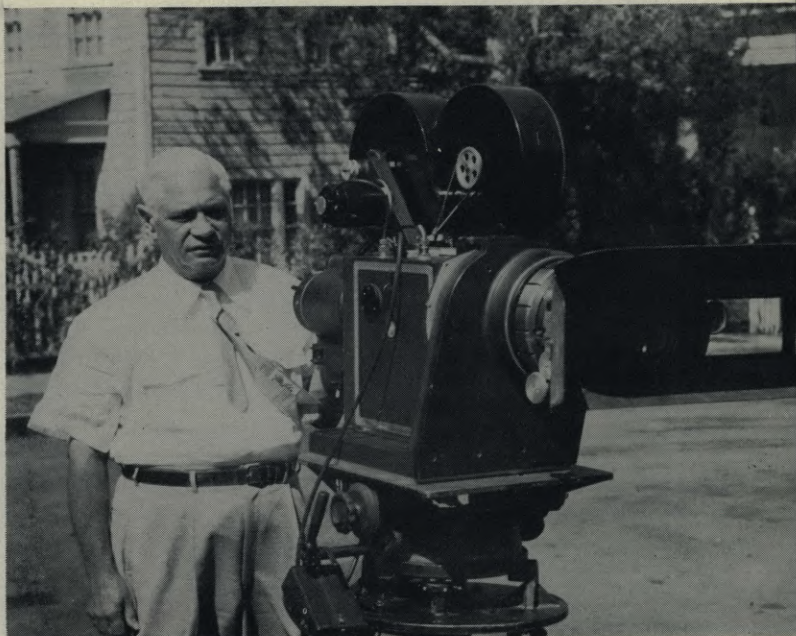
Last year, Bausch & Lomb Optical Company developed for the studio a combination CinemaScope lens in which the anamorphic and the objective lenses are combined in a single unit. This significant step greatly improved definition and depth of field and reduced distortion to a minimum.

The new 4X-55mm camera was designed by Twentieth Century-Fox engineers and utilizes still an entirely new type of anamorphic lens designed by the studio's New York research department and Bausch & Lomb engineers working in concert. With the new lens and the wider 55mm negative, the studio claims it is possible now to achieve greatly improved wide-screen photography—much clearer and better defined pictures and a great deal less distortion on the screen.

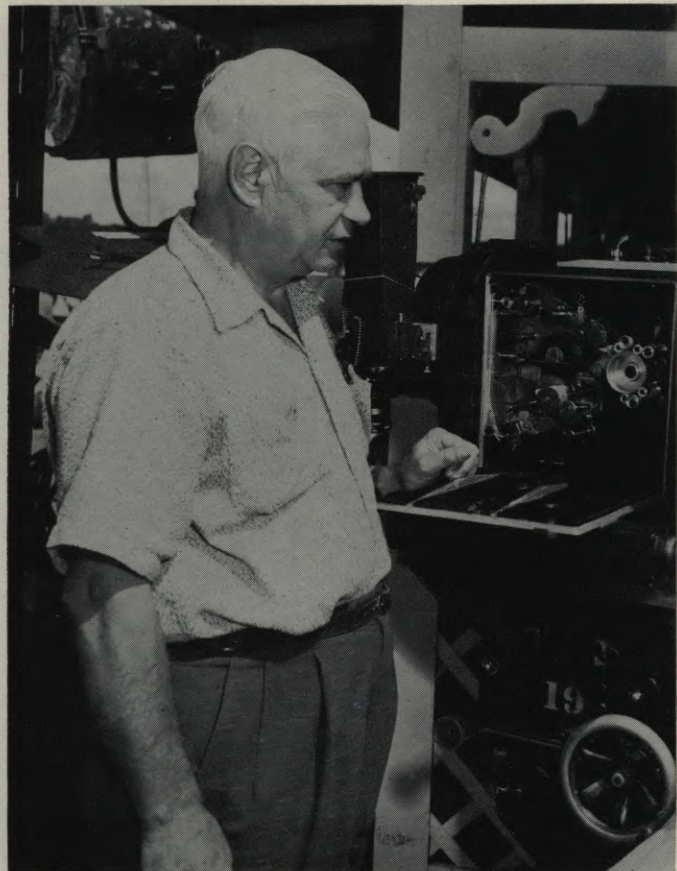
Specifically, what is achieved by the new camera and 55mm film is (1) a wider negative for use in making 55mm release prints for roadshow type of theatre presentation, and (2) by optical reduction of the 55mm negative, a much higher quality 35mm CinemaScope print. Thus it would seem that the studio has taken a major step in fulfilling the promise it made with the advent of its venture into CinemaScope.

According to Sol Halprin, A.S.C., the studio's Executive Director of photography, everything about the new 4X-55mm system is new—camera, lenses, film, new printers, new travelling matte printers, and new developing equipment.

In the beginning, blank Eastman Color negative stock was slit in 55mm widths (actually the fine measurement is 55.625mm), then perforated as required by a machine which



VIEW of right side of camera showing the torque booster motor which powers takeup on magazine. Note the extra-wide CinemaScope sunshade in front of camera lens.



THE wide-film mechanism of the T.C.F. 4X-55mm camera is here viewed by Sol Halprin. New cameras yet to be built will have still greater improvements in the film transport system.

the studio constructed especially for the purpose. Today, of course, the negative stock, properly perforated is being supplied by Eastman Kodak Company.

The first 4X-55mm camera was rebuilt on the lot of T.C.F. engineers. Heading up the project were Sol Halprin, Earl Sponable, and Grover Laube. The present camera is equipped with 1000-foot film magazines. Subsequent cameras, Halprin says, will have 2000-foot magazines and many innovations such as an improved pull-down mechanism, the ultimate in registration, and extreme fine contact at the aperture. Another aim is for complete noiseless operation, with the goal a blimp-free camera, same as the well-known Fox camera universally used on the T.C.F. lot. The new cameras will be built for Twentieth Century-Fox by a prominent motion picture equipment manufacturer.

Following exhaustive tests at the studio, the prototype 4X-55mm camera was assigned to Director of Photography Charles G. Clarke, A.S.C., for shooting the studio's initial 55mm production, "Carousel." Shooting began on location in Maine, and the camera is presently exceeding all expectations.

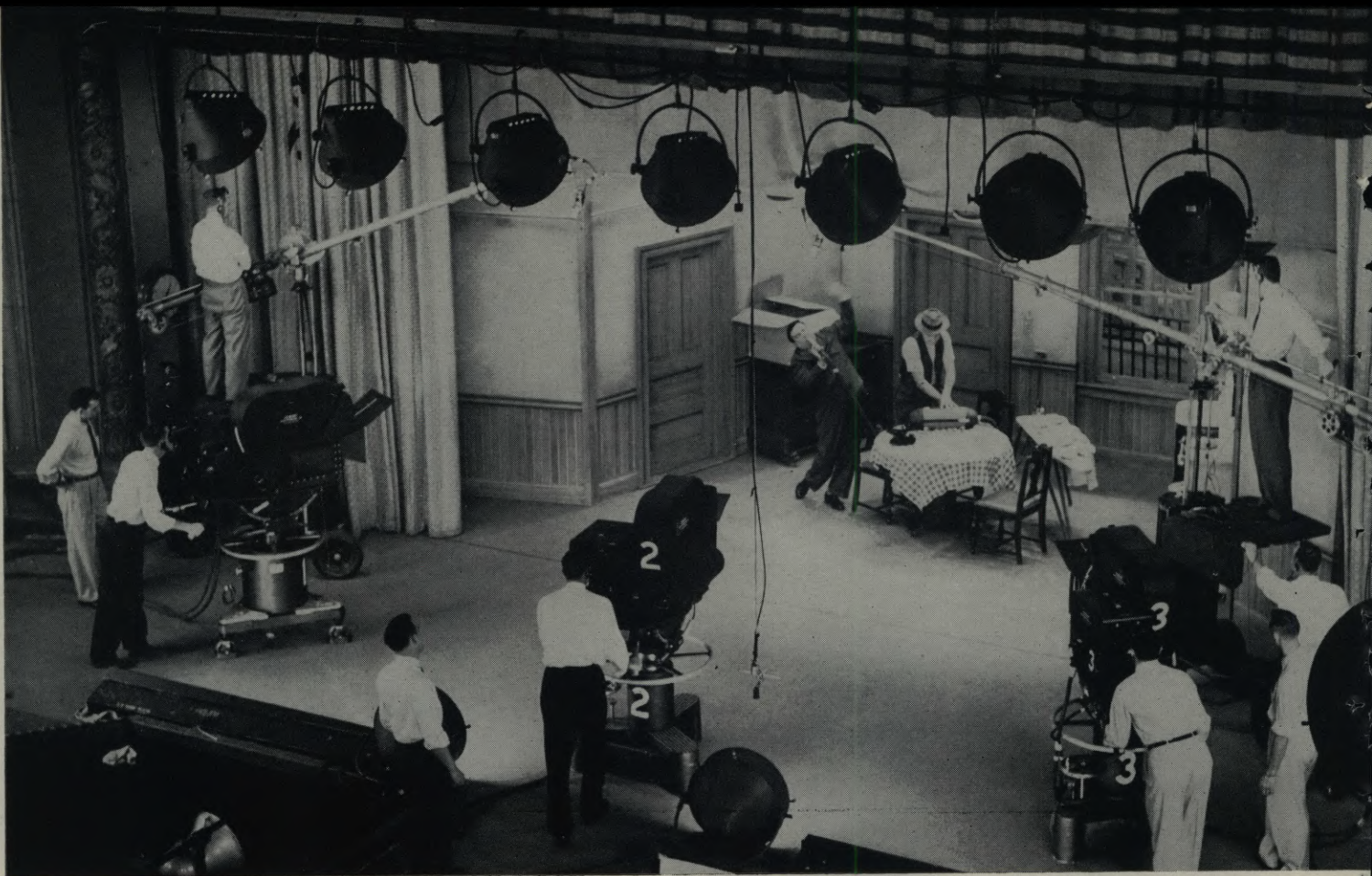
As one might expect the studio to properly do in putting a hitherto untried camera into production for the first time, the 4X-55mm camera was backed up by a second standard 35mm camera, also shooting in CinemaScope, as a protective measure.

It was not until after three weeks location shooting on "Carousel" at Boothbay Harbor, Maine, that studio executives saw any of the 55mm camera results on the screen at the studio. And what they actually saw was a screening of a 35mm reduction print from the 55mm negative. They were so enthused with the wonderful quality of this new medium, Halprin says, that they immediately decided to discontinue the protective photography by the 35 camera.

"As more of the new cameras and lenses are produced," he said, "more Twentieth Century-Fox productions will be scheduled for shooting in the new 55mm medium. However, we shall continue to shoot CinemaScope productions with our regular 35mm cameras. The advent of the new

(Continued on Page 610)





THREE PICK-UP units of Du Mont's new "Electronicam" TV-film system concentrate on Jackie Gleason and Art Carney in a scene being filmed by the process before a live audience in New York's

Adelphi theatre. Electronicam combines TV techniques with highest-quality 35mm photography, reducing shooting time to a fraction of old-method requirements.

## GLEASON GOES "LIVE ON FILM"

First to use the video-film camera in major TV film production is Jackie Gleason who is putting "The Honeymooners" segment of his weekly TV show on film, using Du Mont's new Electronicam system

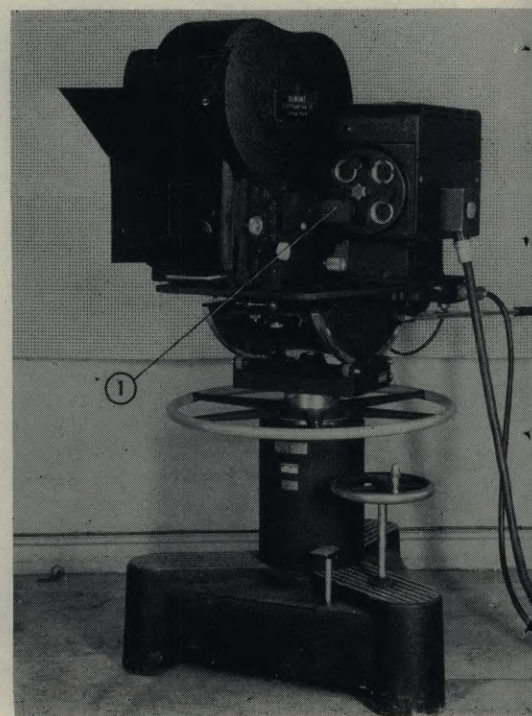
By LEIGH ALLEN

OF THE THREE video-film systems developed and introduced to date, the Du Mont Electronicam is the first and only one to go into practical television film production. "The Honeymooners," most popular feature of Jackie Gleason's weekly 60-minute television show, is the first major TV program to go before the Electronicam cameras.

The Du Mont Electronicam system, as reported earlier in the May, 1955, issue of *American Cinematographer*, is a new and completely engineered method of re-

cording programs on film through the use of "live" television techniques. It differs from "live" television only in that the permanent recording, for "delayed" markets and subsequent re-runs, is a

FRONT VIEW of pick-up unit of new Du Mont 35mm Electronicam TV-film system. Mitchell film camera is on left, TV camera at right. Light passing through Mitchell lens is split into two parts—one to the film, the other via prism (1) to TV camera.







SWITCHING and control panel which permit studio engineers to edit and develop the "editing master," used with the Electronicam system, in rapid cutting of the final high quality film. Special effects such as fades, dissolves, etc., which are electrically created appear in the "editing master."



THE GLEASON show footage shot with the three Electronicam cameras is rapidly edited into a final finished product for distribution by means of the editing equipment shown here. Here the "editing master" is run through the viewer and the various takes in the three camera films selected for cutting into the master print.

camera-photographed motion picture—either 16mm or 35mm—instead of a kinescope with its poor quality and extremely limited use.

Electronicam differs from the conventional motion picture filming in that

(a) it permits cameramen and directors, by means of normal television viewfinders on the camera, and by monitors in the control room, to see what they are recording on film as each scene is being

shot. No longer do they have to shoot "blind" and wait till "rushes" are developed before they know whether they got what they wanted, or whether retakes will be needed.

(b) it enables production units—once they are set up and rehearsed—to record a complete program in no more time than it would take to put that same program on the air live, using as it does, the same TV personnel and the same TV techniques with which all hands—performers and technicians alike—are familiar. Putting a program on film so fast, so smoothly is unheard of in modern film production. But it is this very identity of method which guarantees that the filmed program will have the naturalness, spontaneity and "look" of a live telecast, Du Mont engineers point out.

(c) it cuts costs sharply through the speed-up of both production and editing processes.

The heart of the Electronicam system is a new type of camera, tied by ingenious adaptation to all the production aids of a modern television studio.

The camera itself is manned by a television-trained cameraman. It is equipped with an electronic viewfinder through which the cameraman sees the exact picture being filmed just as he would his

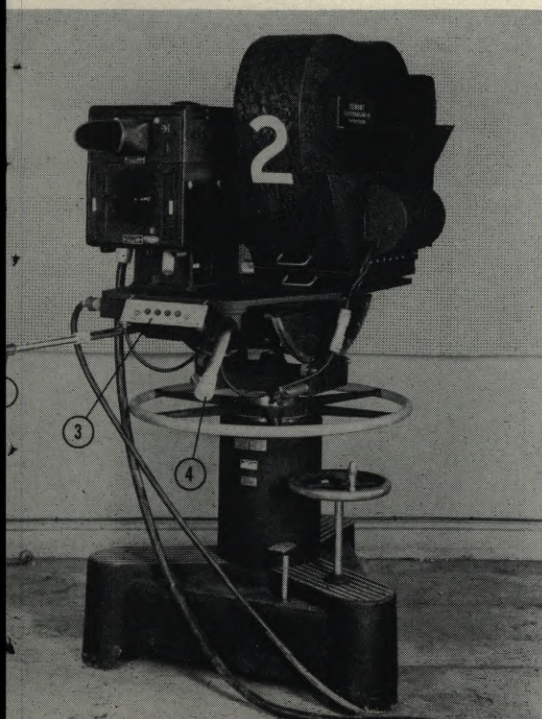
take in shooting a live telecast. At the back of the camera is a focus control which the cameraman uses to obtain perfect focus and the best possible picture composition—even in rapid camera movement. Each camera is equipped with a turret having three lenses which may be changed instantly. Camera mobility, ease of focus and picture composition are those of live television. Gone are the tape measurements, the tracks, the uncertainties and delays of conventional filming methods.

If the production is a multiple camera effort, all cameras run simultaneously and continuously and record the entire program—each from its own position. The picture from each camera travels through live television equipment to a related monitor in the control room. There the director completely controls the camera choice just as in a live TV show. He is actually monitoring the production of a film show, calling his choice of shots onto the "take" monitor, and simultaneously feeding them to standard "kine" equipment where a teletranscription is made as an editing guide. This teletranscription includes all the special effects—dissolves, fades and superimpositions as they come along naturally in the program. They can then be readily duplicated by optical methods as in any film process.

The sound track is produced simultaneously by a choice of conventional motion picture methods.

After the program is shot, all the film

(Continued on Page 598)



REAR VIEW of Electronicam pick-up unit, showing simple controls available to the operator. Control handle (2) guides camera in panning operation. The panel (3) affords push-button selection of camera lenses. Handle (4) affords remote control of focus.



# Preparation Of 16mm Printing Leaders

Recommendations of Association of Cinema Laboratories, Inc., for standardizing the marking and splicing of head and tail leaders in the pre-printing preparation of 16mm films.

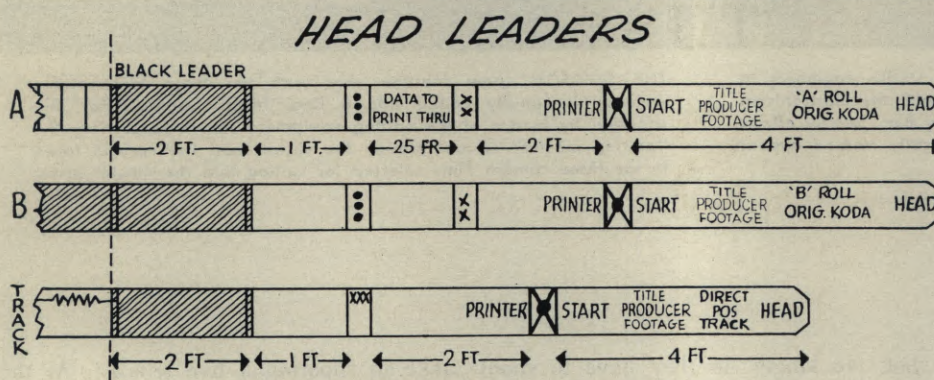


FIG. 1—Recommended procedure for marking Head Leaders.

UNTIL RECENTLY, the methods of the small independent 16mm film producer for preparing his negatives and A & B rolls for the printer have been as varied and numerous as the producers themselves. The consequence has been an increasing load of detail for film laboratories, most of which are now working to capacity.

The Association of Cinema Laboratories, Inc., of which Byron Roundbush, head of Byron Studios and Laboratory, Washington, D.C., is Chairman of the Committee on Pre-print Preparation, recently set up certain recommendations which are now being distributed among 16mm film producers. The essence of the first two bulletins was presented to readers of *American Cinematographer* in the September issue; it dealt with the preparation of original 16mm A&B rolls, and method of marking work prints to indicate effects.

The subject of the third bulletin—the preparation of 16mm printing leaders—is dealt with here this month. Here we shall describe how the leaders for 16mm negatives are prepared and attached to the roll of film. In actual practice, the Association points out, a great deal of time can be saved by preparing the leaders separately, then splicing them to the rolls of negative. The recommended procedure follows:

**Head Leaders:** Head leaders are prepared in the following manner: To a piece of double-perforated white leader approximately 8 feet long (use single-perforated leader if any of the original in the A&B rolls is single-perforated), splice about 21½ feet of double-perforated black leader (use transparent clear leader in place of the black leader when preparing negative picture rolls). Make one of these for each picture roll. Prepare the sound track leader by splicing a piece of single-perforated white leader approximately 8 feet long to a 21½ foot piece of single-perforated black leader. Place the picture and sound leaders in the synchronizer, emulsion up, so that

the splices are opposite each other. From this point measure two feet into the black leader and make crayon marks on the corresponding frames in each black leader. These marks will indicate where the splices should occur when joining the leaders to the picture and sound rolls. Now, turn the synchronizer back to the original splices, and measure one foot forward into the white leader. Editorial (even) sync should be here identified by making marks in the white leader. Three small x's should be placed lengthwise in a single frame in the sound area of the track so that it will print through to the composite print. (See strip A and B, Fig. 1.) Three round dots should be placed running across the film in the corresponding frames of both picture rolls. When the frames with the three dots in the picture rolls are opposite the frames with the three x's in the track, the rolls will then be in "editorial sync."

Now to establish the projection (advanced) sync marks on the picture rolls: In the picture leader, counting the next frame preceding the editorial sync mark as number one, count forward exactly 26 frames toward the head of the white leaders. The 26th frame is then marked with two large X's going across the frame in the picture area. (See Fig. 1.) This is the "projection sync" mark. There should be 25 blank frames between the "editorial sync" and the "projection sync" marks. Now remove the track from the synchronizer and advance it to a position so that the sync marks on the track leader (the frame with the three small x's) are opposite the projection sync marks (the frame with the two large X's) in the picture leaders. The track is now in its advanced position and the rolls are in projection synchronization. Now with the track in this advanced position, measure toward the head of the white leaders two more feet and mark the corresponding frame in the leaders of all rolls to establish the "Printer Start" marks. It is recommended that these marks be indicated

(Continued on Page 608)

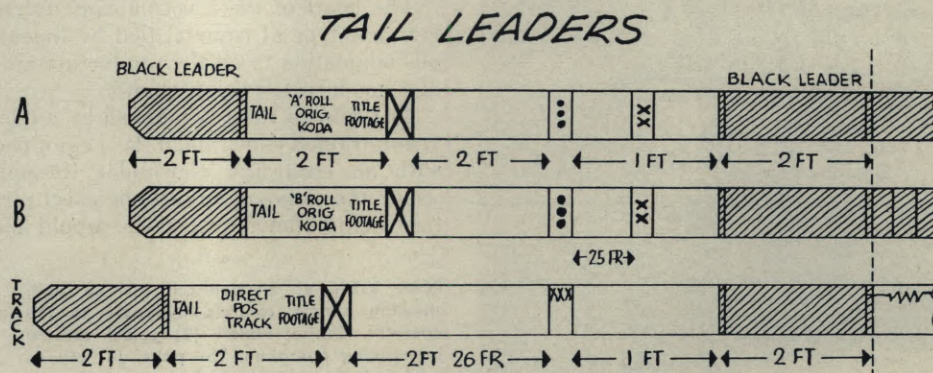


FIG. 2—Recommended procedure for marking Tail Leaders.



# EASTMAN

PROFESSIONAL

MOTION PICTURE

# FILMS

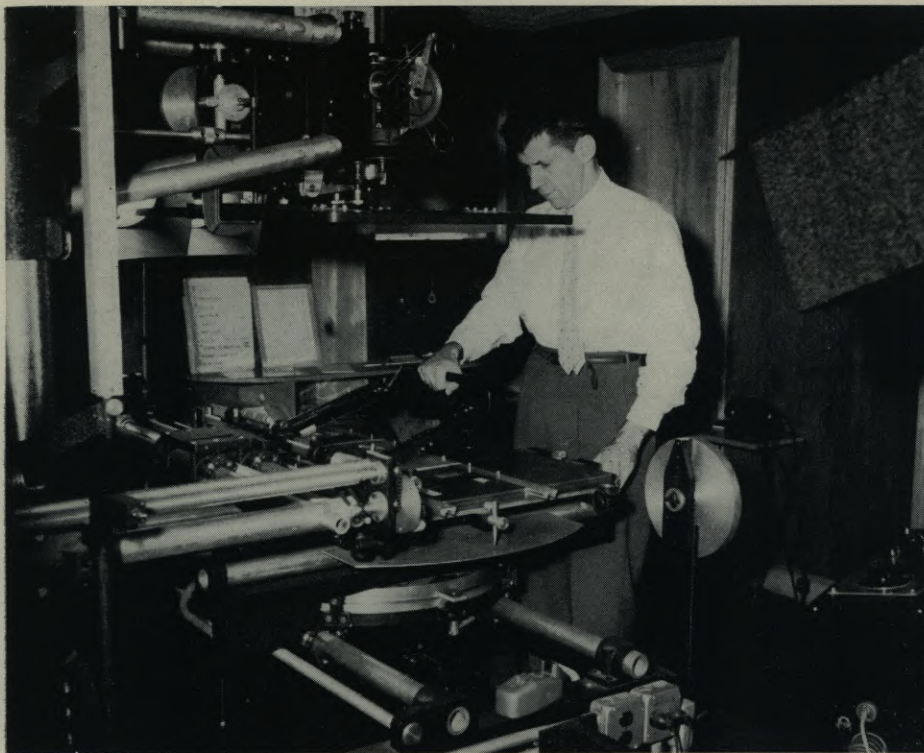
**W. J. GERMAN, Inc.**

John Street  
Fort Lee, New Jersey

6040 N. Pulaski Road  
Chicago 30, Illinois

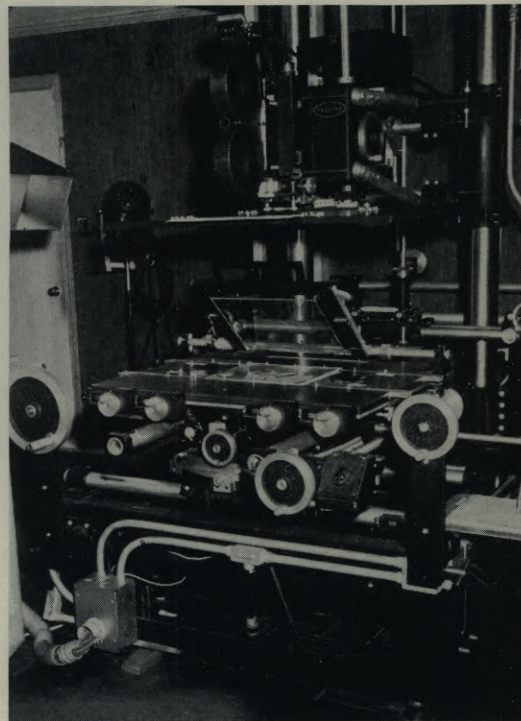
6677 Santa Monica Blvd.  
Hollywood 38, California





**SIDE VIEW** of Oxberry animation stand and compound table. Equipment will handle the most intricate of animation routines, including multiplane compositions. Here Albert Semels, animation cameraman for Chad Associates, Inc., New York, adjust controls prior to making an exposure for a TV commercial sequence.

**FRONT VIEW** of Oxberry animation stand showing hand-wheels and electric switches, which provide rapid and accurate control of animation steps in photography. Exposure sheet guide is at lower right.



## Animation Major Factor In Production Of TV Ad Films

**Producer of TV commercials finds that professional animation equipment speeds production and assures client-pleasing results at minimum cost.**

By VERN W. PALEN  
Animation Equipment Corp.

**A**NIMATION, which only a comparatively few years ago was confined almost entirely to the production of cartoon films for theatre release, is now the favored medium for TV commercials and spot announcements. Studios specializing in animated films are toady working at capacity to supply the tremendous demands of television for punchy, animated advertising messages.

Simultaneously, there has been increasing development in the design and manufacture of compact, efficient equip-

ment especially suited for the independent producer of animated motion picture films. Such equipment boasts automatic and motorized features which enable the independent studio to turn out animated films of highest quality at reduced cost necessary to meet today's increasing competition.

A typical installation of such equipment is found in the studio of Chad Associates, Inc., 40 East 49th Street, New York city. The Oxberry-designed animation stand and



compound automatically coordinates film, camera and platen. Its overall dimensions of 11' 6" height, 5' width, and 6' 4" depth, make the equipment ideally suited to the space limitations of the average independent studio.

A further description of the equipment will be of interest to the reader. The counterweighted camera carriage rides up and down on ball bearings on two precision-ground vertical steel columns. Special cams matched to lenses for 16mm and 35mm follow focus provide two chain-like suspensions which link the camera carriage to the counterweights via two pulleys located at the column tops.

Operated by a five-speed stop-motion motor, the carriage is provided with a faceplate to accommodate all standard cameras and an interchangeable lens mount equipped with a special Ektar lens for animation. In addition, there is a shadow board with geared vertical adjustment. A four-sided scale is mounted alongside one column to facilitate checking the carriage position.

One simple control quickly adjusts a specially-designed follow-focus cam for use with 16mm or 35mm film, as desired. Once the setting is made, the camera lens is automatically kept in focus for all carriage positions, a feature that is especially important for zooms.

The compound table used in conjunction with the animation stand permits a wide range of table movement north and south and east and west using either manual or electric control. The table receives up to and including 6-peg tracks. A 3-point ball bearing system provides a free-moving no-play mechanism. All movement controls have click stops, locks and counters that can be set for movement divided in 10ths or 100ths. Free-wheeling is available for dry runs and fast action shooting. An opening through the table to the floor permits underneath lighting for pencil tests and transparency copying.

With the highly-professional equipment at their disposal, the Chad method of operation is pretty much as one would find it in any top-ranking animation studio. According to Chad Grothkopf, president and producer of Chad Associates, Inc., most of the company's clients come to them with a film idea partially developed in the form of a story-board—a series of sketches matched to a word story. Then follows a long conference with the client at which time it is determined what he wants with respect to:

1. Length of the film
2. Character and action details
3. Lip sync sound
4. Rush or normal delivery.

With this information set down in detail, the studio personnel gets together for an "idea session." Those taking

part include the producer, animation directors, head designer and production manager. Following the crystallization of a plan, the studio then prepares a comprehensive working story-board. This is an expanded version of the client's rough story-board. Layouts are finalized and animation is ready to begin.

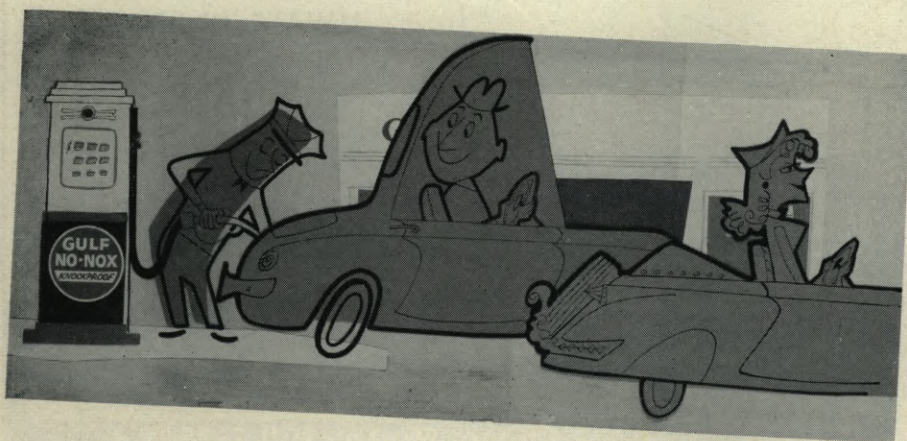
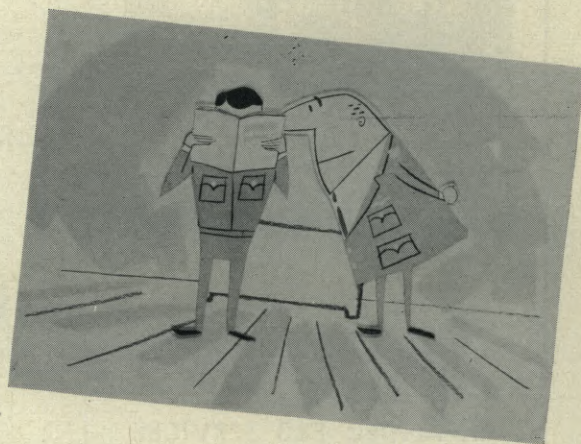
At this point another conference is held with the client at which time he approves or makes changes in the "pencil test" submitted to him. Also, basic layouts, paper background drawing, camera techniques and sound track content are discussed and approved.

To an outside observer, the entire process appears to run smoothly. This, of course, is the result of genuine cooperative efforts and real production know-how. Key idea men, consulting with the client, are responsible for the final, approved conception of the film. Layout and design experts put the idea-men's ideas on paper and add pleasing and stimulating visual touches. The animation directors, in consultation with the animators, add movement. Finally, with the aid of automatic focusing and motorized controls which the company's equipment features, animation cameramen achieve a wide range of tricks and techniques which save production time and provide greater freedom in the animation process.

A film which the Chad organization recently produced in 16mm Kodachrome for Gulf Oil Company was semi-technical in nature, designed to dramatize the superiority of the company's gasoline.

The client's requirements were for 51½ minutes of animation. It was estimated that the job would take 8 months to turn out if 100% "cel" procedure were employed. As it

(Continued on Page 612)



ABOVE ARE three illustrations typical of the animation art produced by staff of Chad Associates for TV spot announcements and commercials. Note use of latest type stylized illustrating technique.



# F&B SPECIALISTS IN MOVIE EQUIPMENT

## SHOOTING COLOR IN A CAVE!

HUGE INDUSTRIAL  
INTERIORS

AUDIENCE  
REACTION SHOTS

COLOR  
NEWSREELS

F & B

NOMINAR 1" f/0.95 LENS

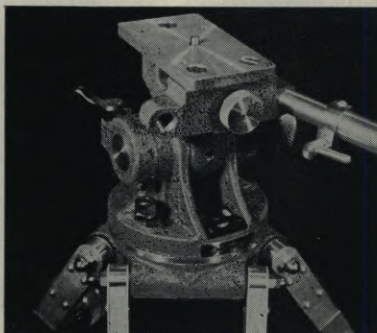
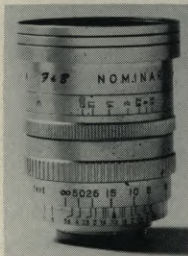
In C mount for all 16mm cameras  
"THE FASTEST CINE LENS IN THE WORLD"  
More than twice as fast as f/1.4

Definition, resolution and contrast as good or better  
than any comparable lens.

Price \$165.00 \$9.90 FET

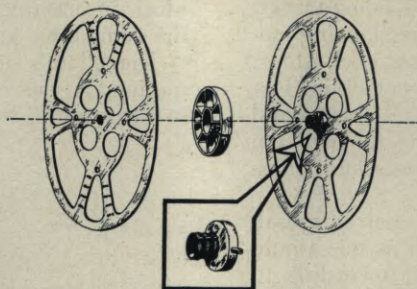
Including—

Series VI filter holder, sunshade  
Screw-on dust covers  
Leather carrying case



### PRO-CINE TRIPOD

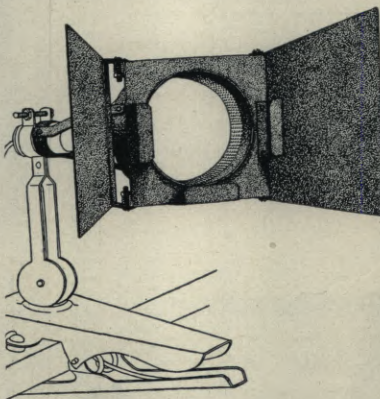
Most Improved Tripod in the Medium Weight  
Class, for All Cameras. Made in USA by F&B.  
Price \$135.00. Heavy Duty Case \$20.00.



### F&B SPLIT REELS

Simply open split reel, slip in film on core, and  
close. 400' \$4.50, 800' \$6.00, 1200' \$7.50,  
1600' \$9.00.

(Professional & Educational Discounts)

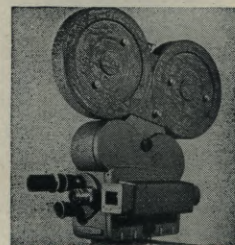


### F&B GATOR GRIP-LITES

With barn doors. Hangs from a nail—clamps  
securely to doors, chairs, flats or stands. Barn  
door swivels 360°. Accepts diffusers, filters,  
etc. Price \$12.95 complete.

## FINE CONVERSION

Cine-Voice  
Conversion  
600'



More than 15  
minutes continu-  
ous filming. The  
only conversion offering Film Movement Sta-  
bilizer for top quality sound.

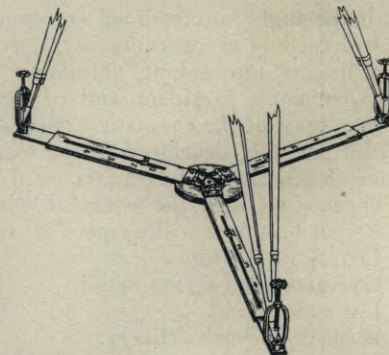
Price \$495 Complete

INCLUDES:

600' magazine  
Dual footage counter  
External noise free take-up motor  
Stabilizer insert  
Complete installation

ONE YEAR GUARANTEE

### F&B Leg-Lok Triangle



Leg-Lok clamps grip tripod legs—no fear of  
points falling out of sockets, cameras and  
triangle can be moved by 1 man now, can  
be used on roof of wagon or truck. Adds  
stability, rigidity and safety.

ALWAYS IN STOCK  
New & Used

AURICON CAMERAS  
ARRIFLEX—16 & 35mm Cameras  
MOVIOLAS—Synchronizers and Rewinds  
BARDWELL-McALISTER—Lighting Equipment  
BALTAR - ANIMAR - EKTAR - ZOOMAR Lenses  
EYEMOS - FILMOS - CINE SPECIALS  
ALL 16mm & 35mm FILM RAWSTOCK  
TECHNICAL BOOKS—G.E. Lamps  
PROJECTORS—B&H, RCA, Ampro, Kodak  
EDITING SUPPLIES—Reels, Cans, Fibre shipping cases  
at lowest quantity prices  
COMPLETE STOCK 8mm CAMERAS, PROJECTORS



- Easily erasable finish
  - Hardwood clapsticks
  - Silk-screened letters
  - Supply dustless chalk
- MODEL 1—9"x11"—\$5.00  
MODEL 2—11"x14"—\$8.75

### EXPANDED F&B SERVICES

COMPLETE RENTAL SERVICE . . . Cameras, light-  
ing, editing, recording and grip equipment.

MACHINE SHOP . . . For expert maintenance by  
trained technical personel of all F&B equipment.

NEW MIDTOWN-STREET LEVEL LOCATION . . .  
Equipment delivered to your car on dollies.

SHOWROOM . . . See displayed and demonstrated  
all the latest in movie equipment.

NEW TIME PAYMENT PLAN . . . Extended time  
payment service, from 90 days to 36 months.

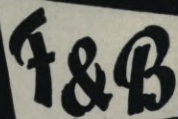
F&B EQUIPMENT CATALOG—24 Pages.

Lists all equipment you need for film production.

F&B RENTAL PRICE LIST—16 Pages.

Complete pocket-size list. Everything at your fingertips  
about the cost of renting equipment for Production,  
Projection, Recording, Lighting and Editing.

BOTH CATALOGS FREE FOR THE ASKING



**FLORMAN & BABB**

68 West 45th Street, New York 36, N. Y.

Phone: Murray Hill 2-2928

Cable Address—FLORBABB, N. Y.





FIG. 1—This is original scene as photographed with conventional Mitchell camera.



FIG. 2—This is composition used by laboratory in making Superscope print.



FIG. 3—This is the resultant Superscope anamorphic print—area .715" x .715".

ALTHOUGH "GLORY," R.K.O. production\* starring Margaret O'Brien, will be shown in theatres in wide-screen format with anamorphic prints, it was photographed in Eastman Color with a standard Mitchell camera and lenses.



Wilfrid Cline

Making possible its exhibition in wide-screen are the release prints made by Technicolor in the Superscope process. While Superscope, perhaps, has not enjoyed the publicity that has been accorded the various other new wide-screen processes, it holds much promise for the future of wide-screen motion picture presentation. Its salient feature is that it involves in the photography no special anamorphic lenses and no special camera. With Superscope, the negative is photographed in the conventional manner that has been standard practice for years. It is in making the release prints that the changes take place.

R.K.O. studio, which aided in the development of Superscope, was the first to recognize the need for a wide-screen process that did not involve increased production costs for such items as special lenses, cameras and film, nor require excessive light levels for set lighting. Very early the studio set about to

\*Produced by David Butler for R.K.O. release.

SHOOTING a scene for "Glory" for release in Superscope and color. Here director of photography Wilfrid Cline and his crew watch rehearsal of action being directed by producer David Butler, center. A standard Mitchell 35mm camera was used for the photography.

## The Superscope Process

With this process, anamorphic prints are produced in the laboratory from straight 35mm negatives, or from double-frame or other wide-area negatives.

By WILFRID CLINE, A.S.C.

find a method that would standardize wide-screen film presentation, and while this standardization still seems a long way off, the Superscope process, studio heads believe, offers the very means necessary to bring it about.

Irving Tushinsky, who with his brother Joseph invented and developed Su-

perscope, has always believed that the proper way to produce an anamorphic print is to do it in the laboratory—in the printing stage rather than in the photography—which is the basis of Superscope. He believes also that the economics of film production are such that

(Continued on Page 610)





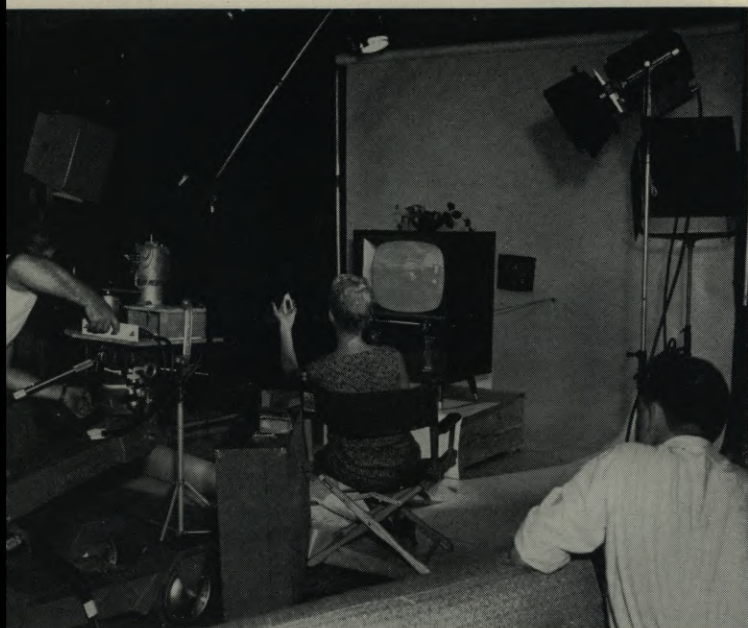


FIG. 1—Resourcefulness enables Philco's film unit to meet just about any problem, such as the one requiring shot of TV screen action in sync with a woman's hand operating a remote control unit for changing channels. Solution? Rear projection.

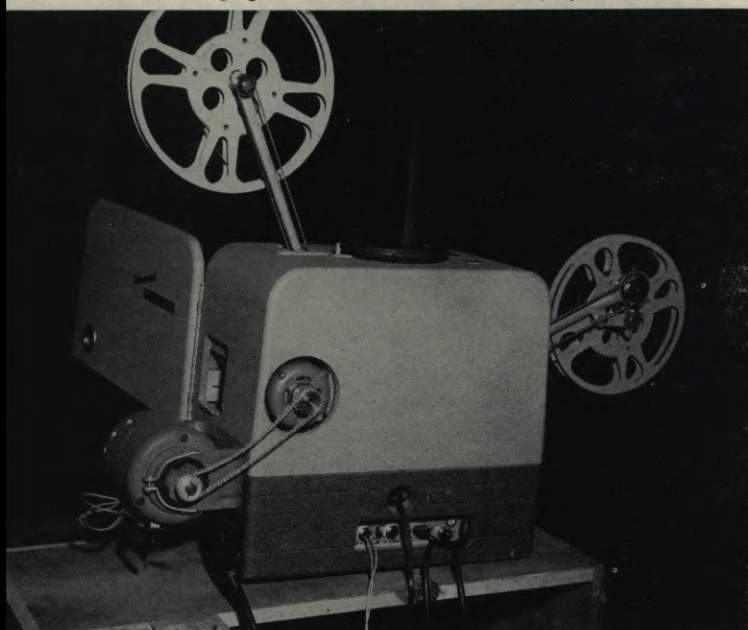
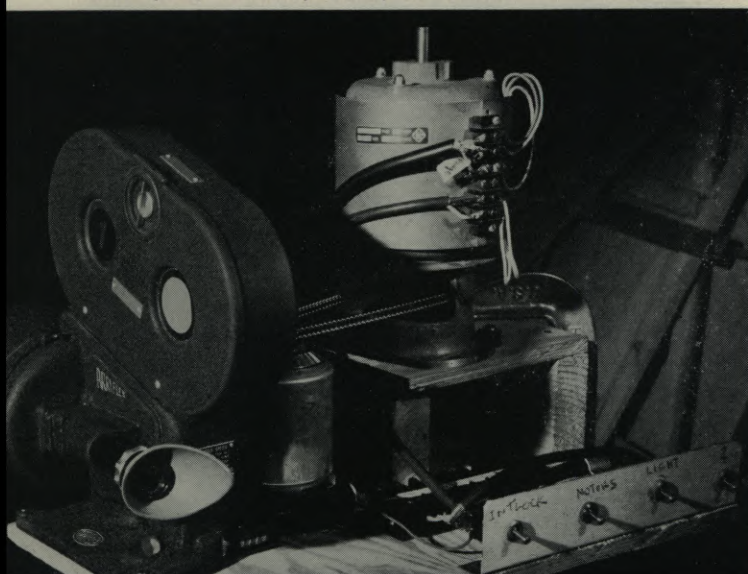
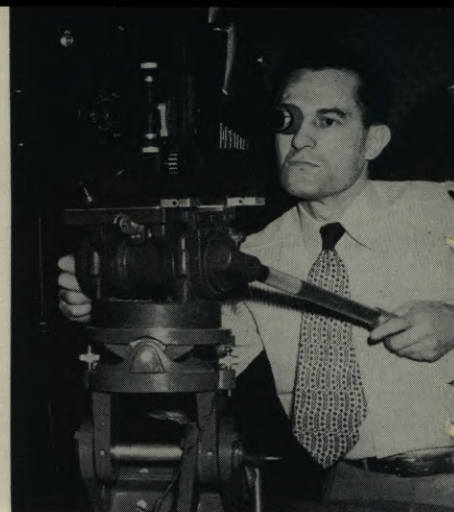


FIG. 2—Both camera and projector were interlocked electrically, using Selsyn motors running off sync motors mechanically geared to the projector and camera drives. Thus, projector was driven at same speed, frame by frame, as camera.



"WE WORK with a concise, yet efficient variety of cameras and filming equipment, both 16mm and 35mm," says Roy Zeper, staff photographer, Philco Recording and Photographic Unit.



## Filming For Philco

Company-produced films range from the "nuts and bolts" variety to television commercials.

By ROY ZEPER

THERE ARE MANY attributes required by the company staff cinematographer—especially when the assignment is a tough one, bound by an inflexible script. But far worse than a rigid script is one containing sketchy outlines, hazily described. It is here that the director and cameraman will record a mediocre interpretation; or, through experience, resourcefulness and imaginative creation lift it into the realm of an impressive, fluid film containing a favorable visual impact that will remain with the audience.

Fortunately, we at Philco can lean on the able direction of the manager of our unit, Carl W. Voelker, backed by his seventeen years of varied motion picture experience.

The majority of our film productions are of the "nuts and bolts" variety; but, within them we have endeavored to match the high standards that have made Philco Famous For Quality The World Over. Production begins with a script originating from the sponsoring department or agency. These scripts have been skillfully composed, not only to advertise, but to explain and teach in an entertaining manner what makes the subject Philco product 'tick'—illustrating the research, technical know-how and engineering that has gone into its inception, development and production—facts well worth knowing in buying or selling.

(Continued on Page 602)

FIG. 3—The interlock system was controlled by the cameraman, using series of switches shown here.



## BRILLIANT PERFORMANCE

That happy glow (limelight?) in Precision's corner is simply the radiance of a solid reputation for sound, careful and accurate film processing. Wotta performer.

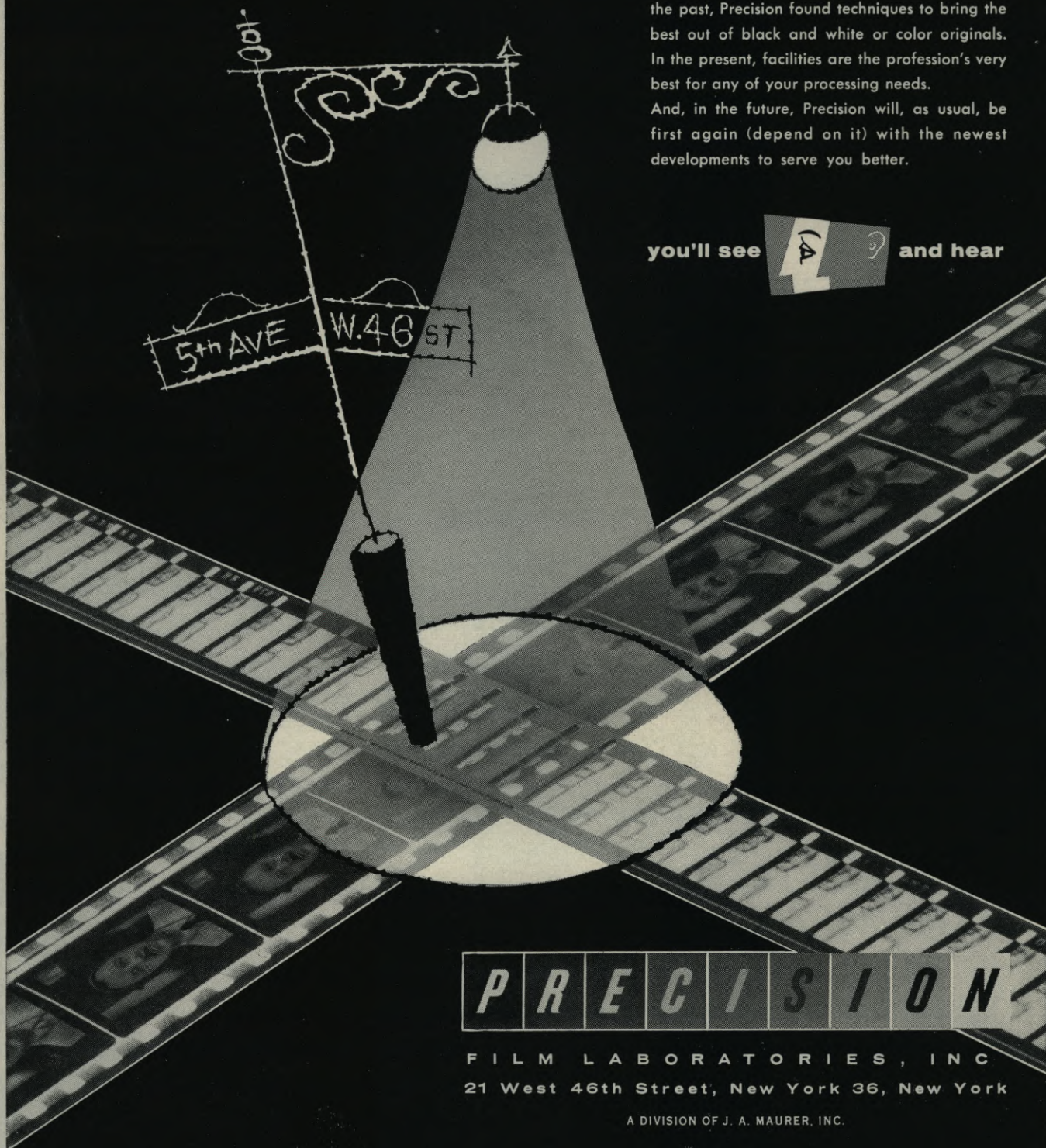
Precision is the pace-setter in film processing. In the past, Precision found techniques to bring the best out of black and white or color originals. In the present, facilities are the profession's very best for any of your processing needs.

And, in the future, Precision will, as usual, be first again (depend on it) with the newest developments to serve you better.

you'll see



and hear



# P R E C I S I O N

F I L M L A B O R A T O R I E S , I N C  
21 West 46th Street, New York 36, New York

A DIVISION OF J. A. MAURER, INC.

In everything, there is one best . . . in film processing, it's Precision



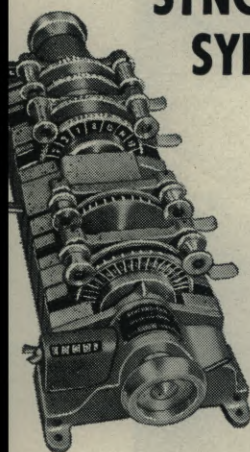
# DEDICATED TO BETTER PERFORMANCE



## COLLAPSIBLE 3-WHEEL DOLLY

For motion picture and TV cameras. Sturdy cast aluminum. For standard or baby tripods. Additional baby tripod point holders to control spread of tripod legs. Adjustable spring seat. Extra wide rubber wheels. Bronze tie down clamps and other features.

For studio or location. Folds into one compact unit. Can be used with professional or semi-professional tripods.



## SYNCHROMASTER SYNCHRONIZER

Our Exclusive Distributor  
*Neumade*

Any combination of 16mm and/or 35mm sprockets assembled to specification. Cast aluminum. Foot linear type, adjustable frame dial. Fast finger roller release. Contact rollers adjusted individually for positive film contact. Sprocket shaft slip lock, foot-age counter, etc.



## PORTABLE MICROPHONE BOOM

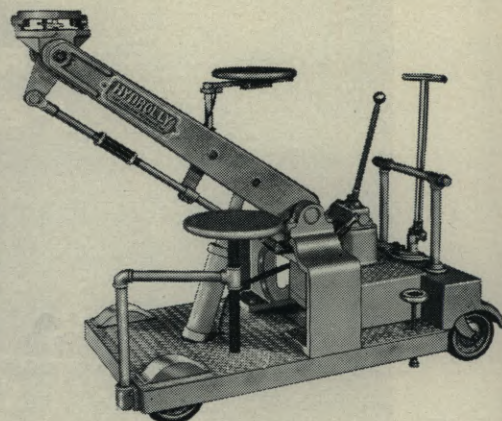
For Studio or on Location. Lightweight — collapsible — for TV and motion picture production. Sturdy construction. Boom telescopes 7 to 17 ft. Rear handle for directional mike control. A remote control permits 360° rotation of the microphone. Operator can push the boom and operate microphone swivel simultaneously.

Extension rods make it simple to operate microphone rotation from floor. Microphone cable hangs outside of boom, preventing cable from tangling with the rotation mechanism. Ball bearing casters, rigid foot locks, pneumatic drop check for lowering the boom, etc.

## 'HYDROLLY'

TV OR  
CAMERA DOLLY

The advanced dolly for instant moveability — streamlined, lightweight, exceptionally sturdy. Nothing to get out of order. Many new advantages for easy operation. Hydraulic lift type for fast upward and downward motion of TV and motion picture cameras.



Swivel seat. Adjustable leveling head. Seat for assistant. In-line wheels for track use. Steering wheel, rigid floor locks. Hand pump or combination hand and motor pump. Easily transported in a station wagon. Fits through a 28" door.

## RENTALS

SALES • REPAIRS • SERVICE

LENS COATING

"T" STOP CALIBRATION

DESIGNING and MANUFACTURING

lens mounts & camera equipt.  
for 16mm, 35mm, TV cameras.

BAUSCH & LOMB "BALTAR"

LENSES and others

for motion picture, TV cameras.  
15mm to 40" focal length.

COMPLETE LINE of 16mm, 35mm cameras, dollies, synchronizers, animation equipment, cutting room and time lapse equipment.

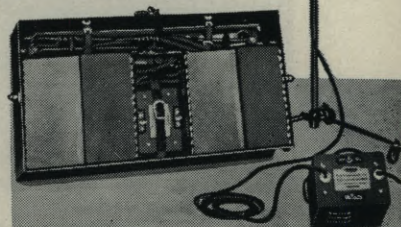
BELL & HOWELL: Standard, Eyemos, Filmos. MITCHELL: Standard, Hi-speed, BNC, NC, 16mm.

SEND FOR CATALOGUE

ColorTran Groverlite

## SENIOR & JUNIOR KITS

"A STUDIO IN A SUITCASE"



ColorTran replaces heavy and expensive equipment... gives you illumination up to 5000w. from an ordinary 20 amp. house current. Equipped with barndoors, diffuser slots for silks, snoots and other accessories. Ideal for studio or location shots.

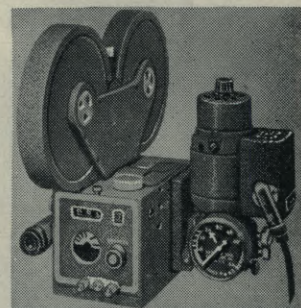
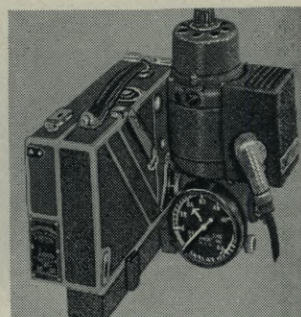
## VARIABLE- SPEED MOTOR with TACHOMETER

for Cine Special or Maurer Cameras

115 V. Universal Motor — AC-DC  
Separate Base for Cine Special.  
Variable Speed 8-64 frames.  
Adapter for Maurer Camera.

INTERCHANGEABLE MOTORS: 12 volt DC Variable Speed 8-64 frames.  
115 Volt AC 60 Cycles, Synchronous Motor, Single Phase.

ANIMATION MOTORS: Cine Special, Maurer, Mitchell, B & H Motors, for Bolex and Filmo Cameras.







THE CONTINENTAL—new Ford luxury automobile making debut this month—is star of sponsored film "Continental" produced by Raphael G. Wolff Studios, Inc., Hollywood. Here veil of secrecy

shrouding car is lifted momentarily so Wolff camera crew can make trucking shot that introduces completed car in picture. Film was produced in sound and color.

## Filming The Birth Of A New Automobile

By AL VAUGHAN

**T**HIS IS THE STORY of a sponsored motion picture whose production had the cloak-and-dagger overtones of an OSS melodrama—of pre-dawn rendezvous—of masked identities—lurking "special agents"—and of a star who met an untimely end and was replaced by a standin. It is the story of the secret birth of a new automobile which this month takes off its wraps to make its bow in public—the Continental Mark II.

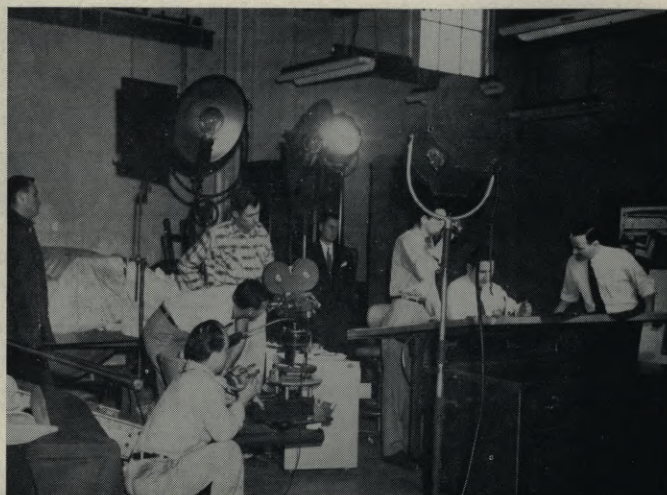
Last February when the Ford Motor Company engaged Raphael G. Wolff Studios, Inc., of Hollywood, to film the story of the development of the Continental—a car designed to be America's finest, and virtually hand made—executives warned the moviemakers that an element of catch-as-catch-can would be involved. It was something of an understatement. For although every conceivable cooperation was ex-

*(Continued on Page 607)*



CAMERAMAN Art Treutelaar (on floor, foreground) lines up scene with William Clay Ford, President of Continental Division, Ford Motor Co., and John Reinhart, chief stylist, for sequence in "Continental."

IN GYMNASIUM of former Ford Trade School, artists work on sketches for the new Continental—a project cloaked in such secrecy that only a handful of Ford men were aware of it. Cameras and crew from Raphael G. Wolff Studios, Inc., were there to record the activities and make them part of the sponsored film "Continental," to be released simultaneously with debut of car.





# Time Lapse Transitions

**New ideas for expressing visually the passage of time that outmode such time-worn cliches as overloaded ash-trays, whirling clock hands and falling calendar pages.**

By HAROLD BENSON

**T**HE HERO takes a puff of a cigarette, and stubs it out in an empty ash-tray. Dissolve to—that's right—an ash-tray overflowing with cigarette ends. Time Has Passed.

But it's been passing that way for years in so many films. Whenever the script demands an interlude between shots, out comes a packet of twenty. Or, if the director's really daring, drinks are handed around and the dissolve introduces wine-glass rings on the table.

Most film makers, whether top professionals or lone amateurs, would rather be buried in film cement than fall back on whirling clock hands. Anyone who indicates the passage of months with falling calendar leaves is regarded with horror. And who would now dare to use a title saying "Ten Years Later?"

But in their anxiety to avoid these cliches, film makers have produced a whole crop of new ones. The cigarette ends and wine-glass rings should be eyed as warily as their predecessors.

The problem of telling an audience that an hour, a day, a week or a year has passed is a fascinating one, for until the advent of the cinema it had never existed. In the theatre time only passes between scenes and acts, with the assistance of a programme note.

The film maker enjoys a freedom of time and place similar to that of a writer, the most unrestricted artist of all. But whereas a novelist can write "It was three months before I saw Harry again," most film makers believe that they should express the three months visually.

Personally I feel that this is not an invariable rule. A visual time lapse is ideal, of course; but if it means deliberately distorting the balance of a scene or sequence, a superimposed caption of the "Three Months Later" variety is surely preferable.

A director who refuses to use a title

under any circumstances is rather like a silent film maker who insists on completely excluding sub-titles from his work even when it takes him twenty shots to say something he could have said in three words. In both cases the idea of searching for a purely filmic method of transmitting vital information is to be applauded. But carried to extremes it can become ridiculous.

Those cigarettes and drinks, for instance, are usually introduced solely to solve the time lapse difficulty. They add nothing to the film, and they often occupy unnecessary footage.

Film meals are frequently as meaningless. The clatter of plates all too often implies that an hour or so is about to be disposed of. How many actresses have ruined their waistlines as they ate their way through rehearsals and retakes to give the director opportunity to

dissolve to that old standby, the table-load of dirty dishes?

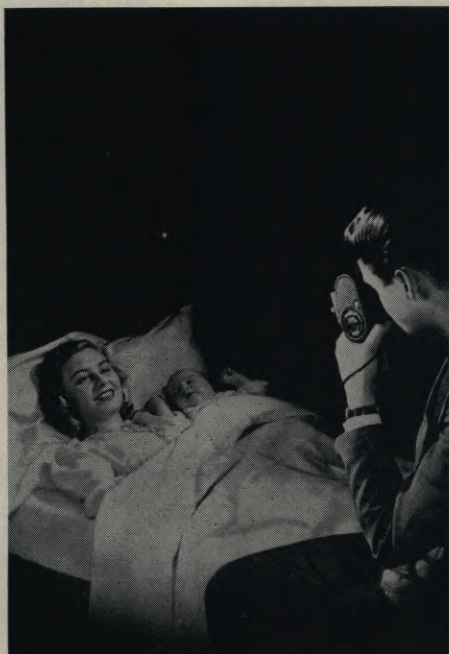
Economy in story-telling is essential to a successful film. Indeed, most of these time lapses are intended to be aids to economy. But if a whole sequence is devoted to the preparation or serving of a meal merely to allow an easy bridge between the neighboring sequences, where is the gain?

In any case, these links are becoming so overworked that a director's originality (or rather his lack of it) may almost be gauged from the extent to which his cast are forced to eat, drink and smoke. The dearth of new ideas in this direction is strange, for there is no reason why time lapses should not be freshly and naturally suggested.

"Freshly and naturally," in fact, is a useful phrase to remember when considering this problem. New ideas are obviously needed; but enthusiasm for novelty should never obscure the importance of keeping the time device in close association with the situation. Each case should be considered quite separately. It's no good thinking up some dream of a device to insure smooth continuity and then searching for an opportunity to use it.

Start with your characters, setting and essential action, and see what they suggest. Even if we're confined to one man and a desert island we can still imply the passing of six months without

(Continued on Page 605)



**IF YOU BEGAN** taking movies of your first born and have continued periodically until he has grown up, as pictured here, you'll probably want to condense the accumulated footage and bridge the remaining sequences together with appropriate time lapse transitions. An imaginative approach will enable you to come up with some original ideas that will make it unnecessary to resort to old transitional cliches.



# The Case For Hand-lettered Titles

**You don't have to be an artist  
to letter your own title cards.**

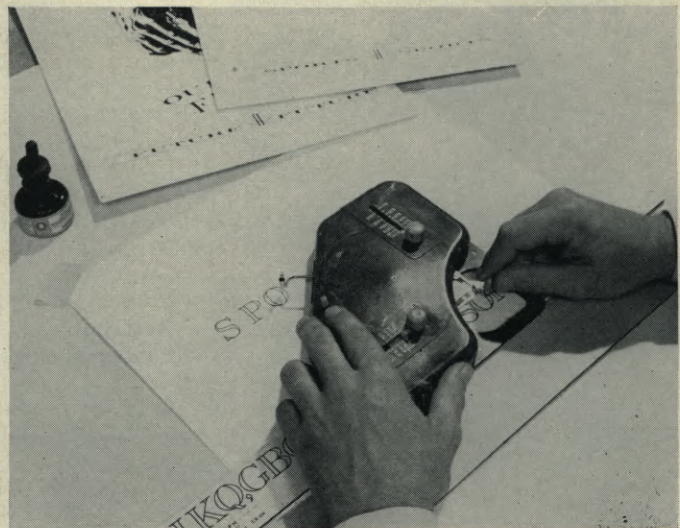
By JOHN FORBES

**M**OST OF THE pictures you see on theatre screens today are introduced by an artistic if not lavish hand-lettered main title. The amateur movie maker with more than ordinary pride in his film making will introduce his films on the screen in like manner. A hand-lettered title not only lends more distinction than other forms of lettering, but it often affords opportunity to work in a decorative scheme in the composition in keeping with the theme of the picture.

This is by no means intended as disparagement against use of block title letters or other mediums of title card composition; it is only that the hand-lettered main title has become so firmly established, through long and continued use, as the introductory caption for motion pictures.

Nor should it be concluded that amateurs with a flair for art and lettering are the only ones who can hand letter title cards. The number of cine amateurs who can do a good job of free-hand lettering may be relatively few, but there are methods of lettering title cards—and certain gadgets and accessories available—that will enable the unskilled to letter with surprising skill.

First there are the Speedball lettering pens, obtainable at stationery stores for about fifteen cents each, which enable the user to achieve remarkable results. Any person

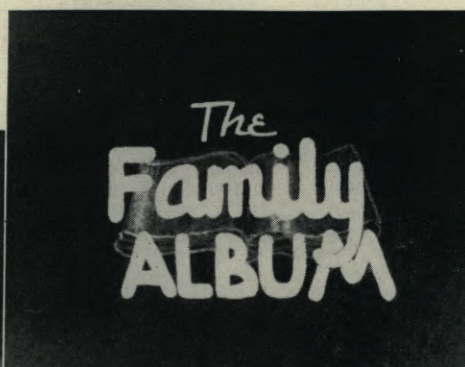
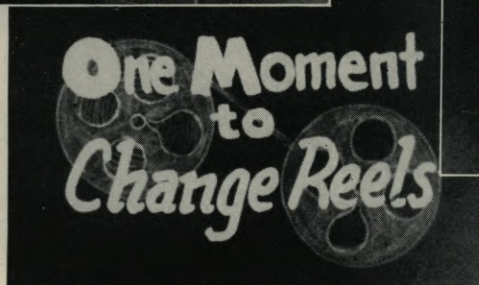


THE VARIGRAPH is just one of several gadgets on the market which will enable the unskilled to do a professional job of hand lettering title cards.

who can hold a pen and draw a straight line can use them with success. Speedball pens come in a variety of styles—that is the points vary in size and width so that it is possible to select a pen for the particular style of lettering desired. These pens hold a supply of ink in the tip, and the broad surface of the tip produces a stroke similar to that achieved by a skilled artist with a brush. They may be used with colored inks supplied by the makers, diluted show-card colors, or black india ink. The manufacturers have prepared an interesting and instructive booklet that shows how to achieve lettering success with Speedball pens. The book is available wherever Speedball pens are sold. Movie amateurs seeking a simple accessory by which to hand letter title cards will do well to investigate.

Another system which assures skill in hand lettering are the perforated lettering guides available at stationery stores which enable the user to make straight, uniform letters with little more effort than writing free hand. The guides, actually templates, are flat strips of transparent celluloid

(Continued on Page 604)



EXAMPLE of typical amateur movie titles lettered by hand. Using pen and ink or brush and colors, the average cine filmer can turn out artistic main titles for his film productions.



## Convert Your Auricon Pro or Cine-Voice to Accept 400-ft Magazines



Shoot Complete SOF Television Programs!

The most satisfactory custom conversion to use all film rolls from 50' through 400' for direct recording of 16mm sound-on-film. Your camera is entirely rebuilt, refinished, or we can supply complete new units on order.

Thoroughly tested, approved and in use by major TV stations.

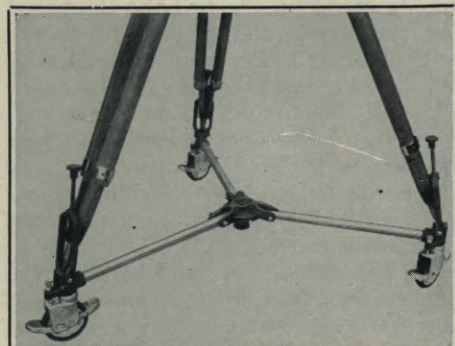
- Magazine will accept up to 500 feet of film.
- Signal light tells when camera is running.
- Direct drive—no lag or speed-up of film travel.
- Extremely accurate Veedor reset-type footage indicator built in.
- Extra camera monitor phone jack.
- Exclusive ball-bearing shaft magazines.
- Canon lock-on plugs for all sound cables.

Write for Literature

Priced from **\$425**

We are also distributors for the  
HILLS FILMATIC 16mm Processor

**HAROLD'S Photography & TV**  
308 South Phillips, Sioux Falls, S. D.



### CINEKAD JUNIOR TRIPOD DOLLY

This collapsible three-wheel tripod dolly is especially designed to meet the demand for convenient mobility of cameras on location or in the studio.

Dolly can be used with any professional or semi-pro tripod.

The tripod is fastened firmly to the dolly by a clamp at each leg tip.

The special individual caster locking system makes it possible to lock either two or three wheels in a parallel position, enabling the dolly to track in a straight line for rolling dolly shots.

Dolly folds quickly into a single compact, easy-to-carry unit, 23 inches in length, weighing 14 lbs.

Write for Prices and Literature

### CINEKAD

ENGINEERING COMPANY

500 WEST 52ND ST., NEW YORK 19, N.Y.  
PLaza 7-3511

DESIGNERS AND MANUFACTURERS OF  
MOTION PICTURES AND TV EQUIPMENT

## GLEASON GOES "LIVE ON FILM"

(Continued from Page 585)

is sent to a laboratory and processed. The director examines the teletranscription which can be made available within hours after the completion of shooting, and which represents his original choice of scene and sequence. If he is satisfied he says "print it," and the individual reels of film from each camera, plus the sound track, are locked in synchronization with the teletranscription, and run through editing equipment for an expedited and simplified cutting and splicing process.

If the director indicates a preference for other shots than his initial choice, coded and timed "takes" from another camera may readily be substituted at this point, and the finished master sent to the printer.

Thanks to exclusive Electronicam short-cuts, the weeks of conventional editing toil are cut to days in this system.

Performers and producers like the Electronicam for the results that it gives them, artistically. Sponsor and agency executives like it for more practical reasons—for its economy, and for all the advantages inherent in film.

The economy and efficiency of the Electronicam system of recording programs on film as compared to conventional methods are quite apparent to all familiar with the older process, and these elements immediately become ap-

parent in the dollars-and-cents cost picture.

The economies start early and run through every step of the operation, because they are the economies of live television as compared with motion-picture methods. The Electronicam, for example, permits quick setting up. The enormous amount of costly time now taken in setting up cameras on a scene-to-scene basis can be eliminated in favor of television technique which features continuity of action. This operation, particularly in elaborate productions where large groups of performers and many sets are being used, can be especially costly, Du Mont engineers point out.

In the Electronicam system, on the other hand, the individual camera monitors in the control room are used by the director in blocking and setting, in rehearsal—without any film being run—and during actual shooting, with obvious economies in time and cost.

Jackie Gleason and his company—Art Carney, Audrey Meadows, and Joyce Randolph—are putting two programs a week on 35mm film at the Adelphi theatre in New York for "The Honeymooners" series, which will go on the Columbia Broadcasting System under Buick sponsorship this Fall. Gleason has found that he can work with the new camera exactly as he has worked on live TV

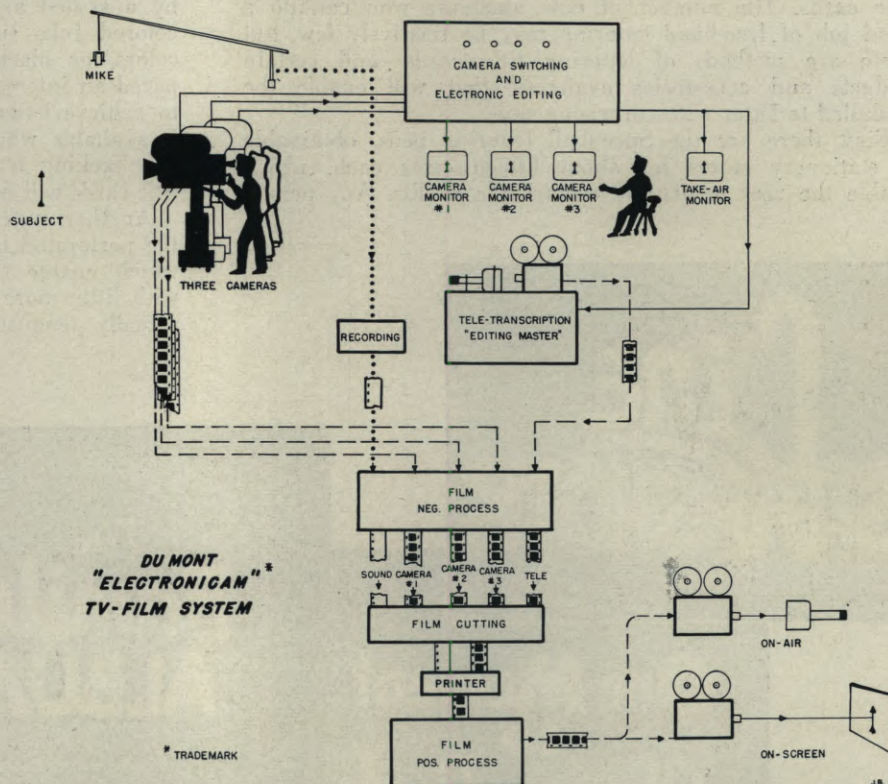


DIAGRAM shows how Electronicam system works from time scene is photographed (upper left) to the finished film image ready for projector or air transmission (lower right). The three camera images are recorded on motion picture film at same time they are sent electronically to camera switching panel where the selected "takes" are recorded by teletranscription.



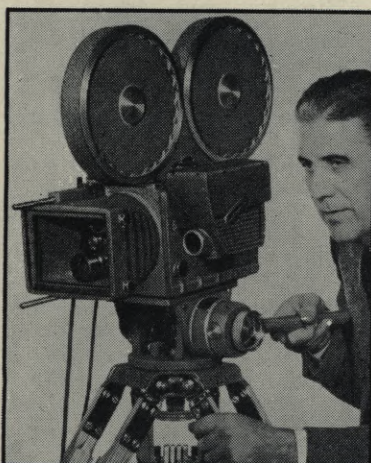
# The One-Stop Source Of Supply

S.O.S. Has YOUR BEST DEAL

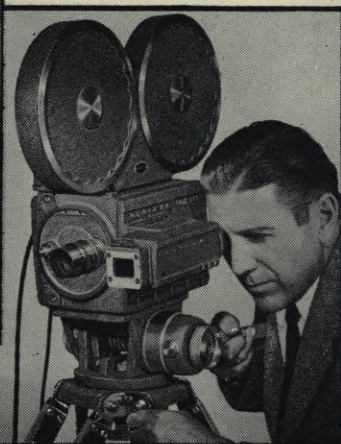
ON

## The ALL NEW AURICON PRO-600

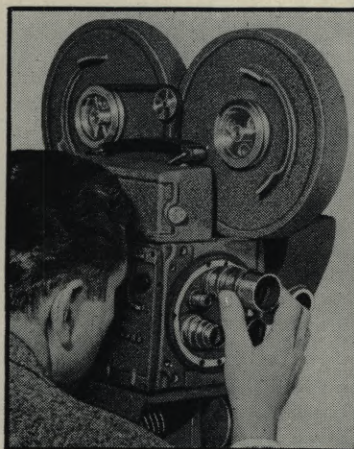
for 16mm Optical Sound-On-Film



"Auricon Pro-600" with Lens Blimping Hood, Auto Parallax Finder with Magazine, Tripod



"Auricon Pro-600" with Single-Lens "C" Mount, Tele-Finder Objective, View Finder, Magazine



"Auricon Pro-600" with Critical Ground-Glass Focusing, 3-Lens Turret

Professional Picture Camera with Built-in Features

- ★ Self-blimped for completely quiet studio operation. The whisper-quiet film flow of the "Auricon Pro-600" is silent proof of precision design. Your sound-recording microphone never picks up "Pro-600" Camera noise!
- ★ 600 ft. film Magazines with Auricon-Electromatic Take-up, for 16 minutes of continuous "Talking-Picture" filming.
- ★ Synchronous Motor Drive for "Single-System" or "Double-System" Recording.
- ★ Available at added cost is "Single-System" equipment for Optical Sound-Track-On-Film, "C-mount" Lenses, Film Magazines, View-Finders, 3-Lens Turret, Critical Ground-Glass Focusing, Lens Sun-Shades, Tele-Finders, etc.

- ★ Sold with 30 day money-back guarantee, you must be satisfied!

PRICES START AT \$1165

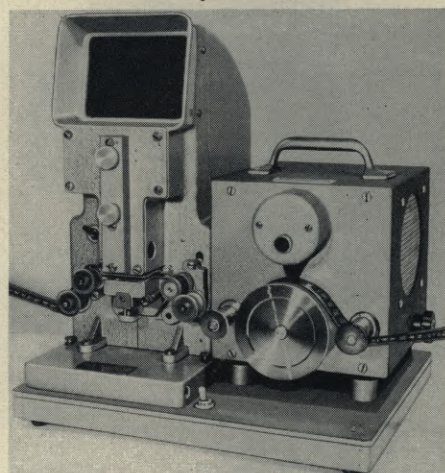
Write for free illustrated "ALL NEW Auricon Pro-600" literature and prices

### SPECIAL OFFER to AURICON-PRO OWNERS

S.O.S. will accept your old camera as a trade-in for the "All New Auricon Pro-600". Time Payments, Too!

## Edit Film Safely with the

EDIOLA ACTION VIEWER AND SOUND READER

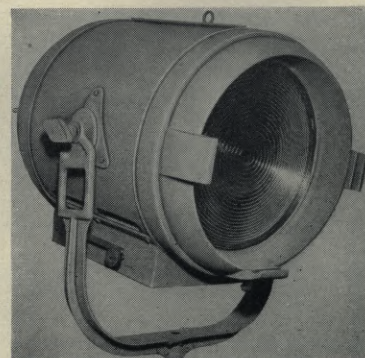


A low priced professional 16mm Action Viewer—projects big, clear aerial image—roller smooth, left to right—synchronized with Precision Sound Readers on Special Base—Write for brochure.

In combination with Sound Reader & Base.....	\$347.45
S.O.S. Ediola Action Viewer.....	124.95
Optical Sound Reader.....	185.00
S.O.S. Ediola Base only.....	49.50

## OLESEN CHROMOSPOTS LIGHTING EQUIPMENT

Acclaimed by TV Stations, Motion Picture Producers and Major Studios



OLESEN lighting is recognized the world over for extra versatility, power and range of fine lighting so essential to catch the complete detail of set and action of the camera. ALL SIZES from 100W to 10,000W.

- The most advanced scientific engineering — produces unparalleled evenly distributed illumination across the entire field at full speed.
- Meets all the new lighting requirements of color television and wide screen motion pictures.
- Better light control and wider versatility of illumination for every requirement—from small spot focus to extra wide flood focus without "ghosts" dark center spot found in other lamps.
- Cooler in operation, prolongs lamp life. Outstanding for sturdiness and durability, yet about one-third lighter for easy handling and maneuverability on the set.

WRITE FOR CHROMOSPOT CATALOG illustrating complete line of lighting equipment and accessories

## Take Advantage of S.O.S. Time-Payment Plan

Convenient payment terms arranged. You may apply your idle or surplus equipment as a trade-in.

"The Department Store of the Motion Picture Industry"

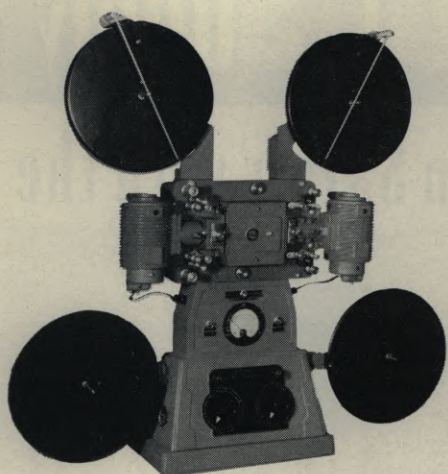
S.O.S. CINEMA SUPPLY CORP.

602 WEST 52nd ST., NEW YORK 19, N.Y.  
Phone: PLaza 7-0440 Cable: SOSOUND



BRANCH OFFICE: HOLLYWOOD, CALIF., 6331 Hollywood Blvd., HO 7-9202—For Other S.O.S. Offerings See Page 580





## UHLER

### 35-16mm. Optical Reduction and Enlarging Printer

Uhler 35-16mm Optical Reduction & Enlarging Printer. Reduces 35 to 16mm and enlarges 16 to 35mm in color or black and white film. The registration is the step printing method with color corrected optical system. The mechanism is precision engineered. Semi-automatic dual light controls. 1200 ft. capacity.

The machines are tested and guaranteed. They are built for long and lasting operation. Further specifications on request.

We will be pleased to forward circulars on other types of printers also.

#### UHLER CINE MACHINE CO.

15778 Wyoming Ave., Detroit 38, Mich.  
Phone: University 1-4663. Cable: "UHLICIMA"

# LAB-TV

## Professional 16MM BLACK & WHITE REVERSAL PROCESSING

Processing on  
hourly schedule for  
leading TV Stations and  
Producers

### FASTAX SPECIALISTS

Write for Circular

247 W. 46th St.  
New York 36, N. Y.

and, for that reason he's confident that he will come up with a show that will have all the bounce, all the spontaneity and naturalness of his live telecasts.

He and his company come to rehearsals around 2 p.m. Tuesday and Friday afternoons, run through their lines and action till 3:30 or 4, and then break for dinner. Back at 8, they find an audience of 1200 awaiting them, and they film the show in the same time it takes to perform it—recording laughs and fluffs just as they fall for what Jackie calls "an honest performance."

As may be seen in the photo on page 584, three Electronicam 35mm cameras are used. The crews for each consist of a first film cameraman, an assistant film cameraman, a television cameraman and one cable boy. After the cameras are set up and the set is lit, the television cameraman does the actual recording or operating.

The cameras work consistently at an aperture of f/5.6, using Tri-X film, and all three operate continuously even when their respective pickups are not selected for the "line" by the director sitting at the master monitor.

Warren Wade, one of television's best known pioneer producers, is filming his award-winning "Broadway TV Theatre" with Electronicam on 16mm film at the Telecenter.

Several program packages have also put pilots for their Fall productions on film via Electronicam.

One of them who made a 90-minute show famous says that the Electronicam system alone makes the filming of such a series a practicable matter. "Our series," he adds, "was successful because the program gave viewers the sense of actually sitting in a theatre watching a hit. Live TV caught the mood, the feel, of the production and got it across to viewers. Conventional film production methods have never been able to do that. The Electronicam, however, gives a producer all the flexibility and mobility of live television.

"Under the old conventional system, a producer was required to shoot his play in segments, wait to look at the rushes of what he had done, and go on and shoot some more—a procedure that interrupted the flow of thought and action, simply destroyed dramatic impact. Once we start dramatic action in front of the Electronicam, we run right through to the end. With the Electronicam we can put the whole play on film in not much more time than it would take to telecast it, thus maintaining the mood heretofore associated only with live production."

Another program packager is putting five episodes of a serial drama on film in one day of shooting plus one day of setting up and lighting—with the approbation of his sponsor, and the cooperation

of its agency. A job like this, the producer says, would have cost so much that, despite the advantages of film, he had always kept the show on the air live. (It is currently a daily feature on NBC-TV.)

Another producer tried for a long time to get his five-day-a-week serial on film. For one week's series, he requires fifty minutes of film. He sought estimates from several established film production firms. Their estimates ranged from a low of \$15,000 to a high of \$18,500. With the Electronicam, he will be shooting his required 50 minutes on the schedule given above at costs within his budget.

Another feature that a packager likes about the Electronicam is that working with this system he can retain his producers, directors and actors—all television people who continue to work with techniques already familiar to them.

The new 35mm Electronicam pick-up unit, developed by Du Mont's Research Laboratories engineers, offers major improvements over earlier versions of the system. It includes an especially designed and adapted Mitchell motion picture camera with an image-orthicon television camera in a single operating unit. High quality films may, therefore, be made using electronic viewing screens as a guide in shooting a picture and incorporating the same fast production techniques that are an integral part of live television programming.

In the 35mm Electronicam, an optical system splits the light so that it is shared by both the film and the electronic pick-up sections of the Electronicam simultaneously. The proportion of the light sent to the two pick-up units may be varied widely depending on the type of film used and the lighting conditions under which the footage is exposed.

The sensitivity of the image-orthicon camera—it requires much less light than a movie camera for satisfactory operation—permits the light to be split in such a manner that the film pick-up section receives a maximum of the available light being used at any time.

The new 35mm Electronicam operates with the same facility as a conventional television camera, allowing the same freedom of movement and ease of focusing. A handle at the rear controls focus for the common lens system. This permits continuous control of focusing throughout the shooting sequence. Thus, the advantages of television "ad lib" focusing and camera direction are made available to the motion picture director. The operator of the Electronicam pick-up unit determines the focus by looking at the image in the unit's electronic viewfinder.

A new panel control on the 35mm Electronicam permits any one of a



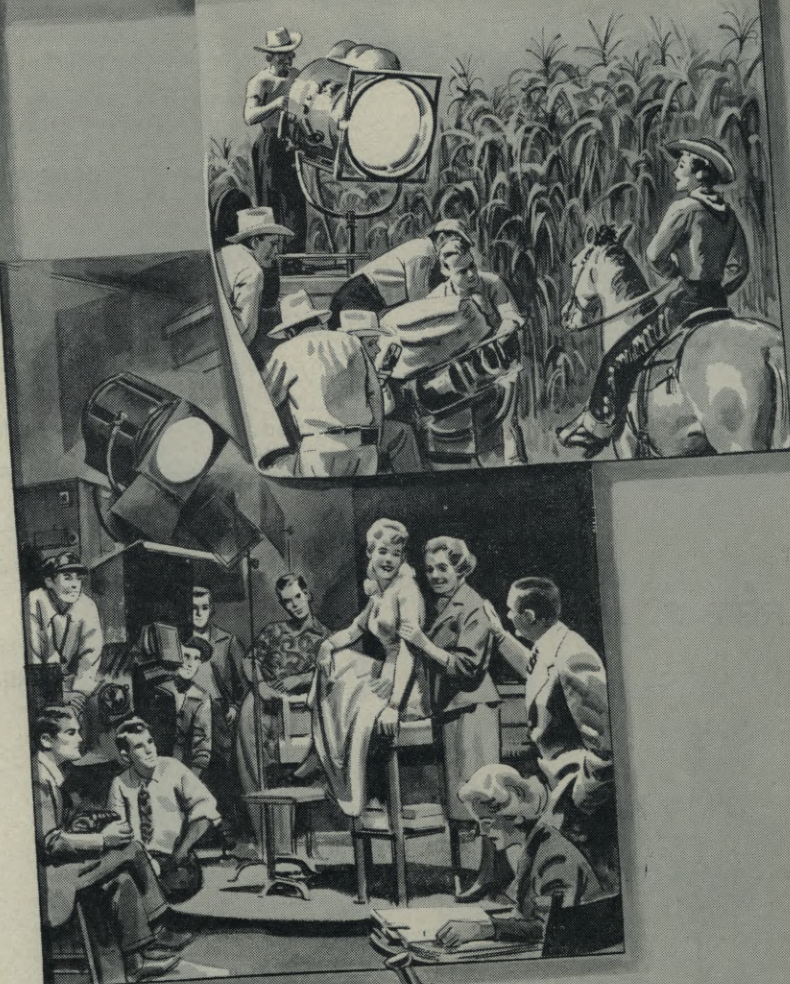
# NOW... MATCH EITHER WHITE OR YELLOW LIGHT FILMS WITH **NATIONAL** STUDIO ARC-CARBONS

TRADE-MARK

The advantages of carbon arc studio lighting have long been recognized. Until recently, however, it was necessary to filter carbon arc sources very heavily when shooting on a yellow-light basis.

Now, with the new "National" yellow-light studio carbons, you can freely mix arc lamps and inkies on the same set with minor filtering and virtually no loss of useful light. This new carbon nearly doubles the effective light from arc sources without additional power input — or, where arc-lighting is essential for broad coverage, penetration or modeling, it reduces by almost half the number of arc lamps needed for 3300°k film.

Here, again, National Carbon's research facilities, prompted by the company's long association with progress in film-making, have paved the way to substantial production economies without compromising the industry's high standards of excellence.



*The term "National" is a registered trade-mark  
of Union Carbide and Carbon Corporation*

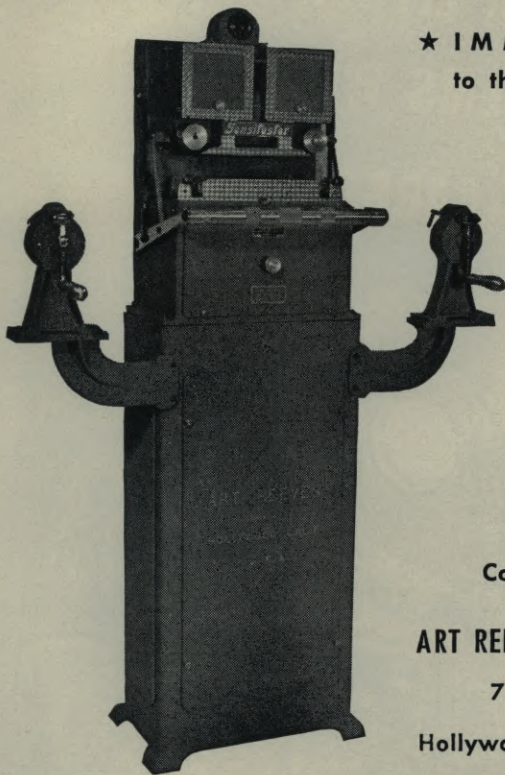
**NATIONAL CARBON COMPANY**  
A Division of Union Carbide and Carbon Corporation  
30 East 42nd Street, New York 17, N.Y.

SALES OFFICES:  
Atlanta, Chicago, Dallas, Kansas City, Los Angeles,  
New York, Pittsburgh, San Francisco

IN CANADA:  
Union Carbide Canada Limited, Toronto



# Model 35-16C SENSITESTER



★ IMMEDIATE DELIVERY  
to the lab owners interested in—

**QUALITY  
EFFICIENCY  
ECONOMY**

- DUAL MACHINE  
1—Sensitometer  
2—Scene Tester
- HIGHLY ACCURATE  
Electronic timer unaffected  
by climatic changes.
- NEW TYPE LONG-LIFE  
Cold Light Exposure Unit

**NEW LOW PRICE**

Combination 35mm-16mm

**ART REEVES MOTION PICTURE EQUIP.**

7512 Santa Monica Blvd.

Hollywood 46

California

group of lenses to be selected electronically by merely pushing a button. Another new development used with the 35mm Electronicam is a footage and elapsed-time counter. This device, situated in the control room of the film production center, indicates the amount of film footage which has been exposed on any Electronicam unit being used and the amount of running time which is represented by the footage exposed. Film producers, therefore, have an instantaneous means of checking from a single point the operation of each camera in use as an aid in timing programs, an important factor in television broadcasting.

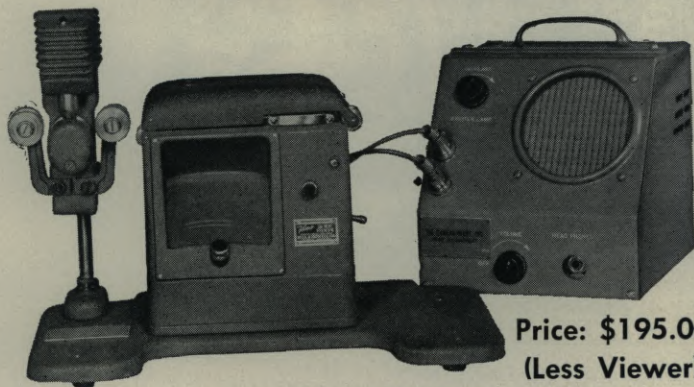
Du Mont's engineers say that Electronicam will prove especially valuable in the production of color films for television. Live color programming today suffers from a lack of uniformity in the technical quality of the pictures presented from one camera to the next. This is partly due to electronic instability in the color television cameras and to the fact that the quality of the pictures presented by each camera varies widely. In contrast, the 35mm Electronicam permits a program to be filmed in color with rigid control of the shooting at all times so as to achieve a uniformity of quality that cannot be equalled by live color programming. Electronicam also gives results which are far superior to any present method of electronic recording on tape.

According to Du Mont, 35mm Electronicam units will be made available on a national basis for use by the motion picture industry, TV film producers, television stations, and for production of industrial, educational and governmental films.

HERE IT IS . . . . .

## The Dual Reader

Patent  
Pending



Price: \$195.00  
(Less Viewer)

another CAMART product!

- NOW YOU CAN HEAR SOUND  
WITH ANY SILENT PICTURE VIEWER!
- SINGLE AND DOUBLE SYSTEM!
- HI-FI LIP-SYNC SOUND.
- SEND FOR DESCRIPTIVE LITERATURE!

**THE CAMERA • MART, INC.**

1845 BROADWAY at 60th St.  
New York 23, New York

Phone: Circle 6-0930  
Cable: CAMERAMART

## FILMING FOR PHILCO

(Continued from Page 592)

These films serve many useful company purposes. They acquaint our distributors and dealers with the new lines in production or shown at our semi-annual conventions; they explain to the world-wide family of Philco dealers, as well as to prospective customers, the newly developed features, styling and electronic advancements; also, we produce television commercials and spot announcements for general public dissemination.

Filming some difficult shot can lead to a score of technical difficulties, but having access as we do to some of the best electronic brains and equipment in the world proves invaluable in solving some "impossible" problems. Like the one recently that called for a shot of a television receiver with picture and with the screen action appearing in synchro-



nization with a woman's hand operating a remote control unit changing the TV station. (Fig 1.) While rear projection seemed to be the answer, still a number of problems remained to be solved.

First of all, the projector shutter had to be synchronized with the camera shutter so that each would open simultaneously for the exposure, then advance together at the precise same time. The external drives of the projector and the camera would have to be run at the correct number of revolutions to achieve 24 frames per second; which incidentally, did not match RPM for the required 24 second frame speed.

It was necessary to light the set so that no illumination fell on the translucent screen; station flopper had to be introduced with each station change; the channel selector knob rotated; also, the actress cued when to press the automatic tuner switch . . . all of these to take place almost simultaneously, in their proper sequence.

Two Selsyn motors, one on the camera and one on the projector, were electrically interlocked. These were driven by sync motors on the Arriflex (Fig. 3) and the projector, (Fig. 2) through chain drives which were appropriately geared. This solved the equipment sync problem.

The personnel sync-cueing-system was simply performed by applying an inch-long piece of magnetic tape along the sound edge of the film at a 50 frame distance before each scene change. The projector was operated with the magnetic playback head functioning, thus establishing an audible cue of one second as to when to expect the film scene change (26 frame normal track advance; 24 frame for the one second cueing advance).

Drawing from our bag of production and lighting techniques, we came up with a sequence meriting the approval of film layman and expert alike. We work with a concise, yet efficient variety of cameras and filming equipment, both 16mm and 35mm; we use our own ever-expanding prop department, and construct the majority of our sets.

Prior to actual production, each day's anticipated shooting is carefully analysed, enabling us to prepare talent, props, camera and actors' action in establishing a pre-conceived shooting plan. Each job is tackled as a direct challenge from which to put the best into each frame; working diligently at improvement until we feel that optimum results are safe within the can.

An unusual shot may require days of camera planning and execution, and last but a few seconds on the screen; but, if it sparks the visual impact necessary to drive home a noteworthy point of information to the viewing audience, it warrants the effort expended.

END

# CAESAR-SALTZMAN

## Special Effects Optical Printers and Animation Equipment

- ANIMATION
- TITLES
- STILLS
- CARTOONS
- TRICK PHOTOGRAPHY

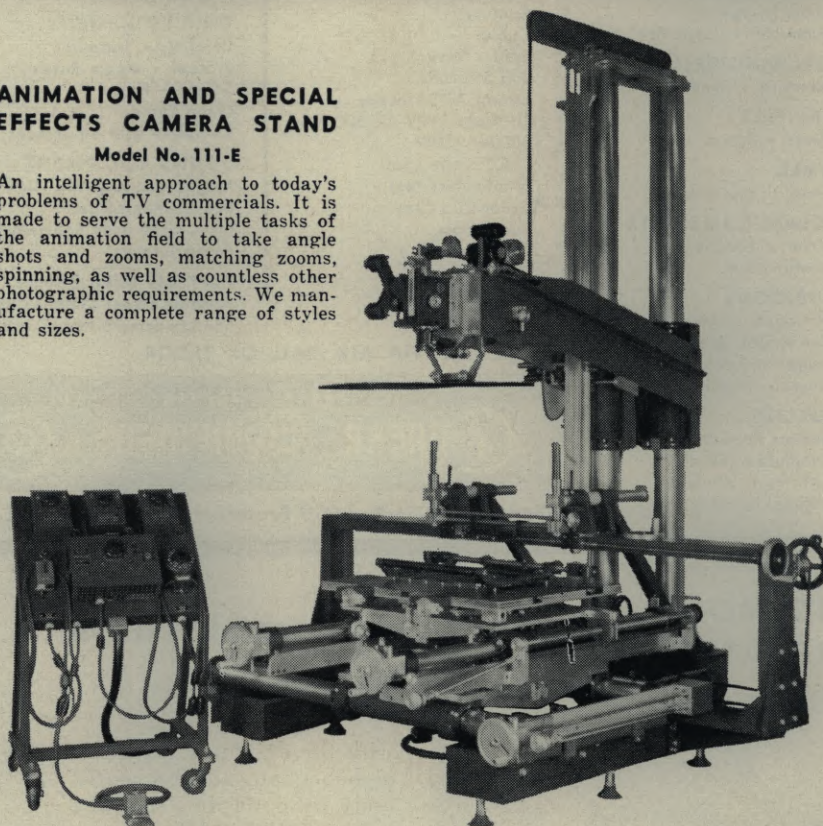
For

- INDUSTRIAL MOTION PICTURES
- EDUCATIONAL MOTION PICTURES
- TV MOTION PICTURES
- ENTERTAINMENT MOTION PICTURES

### ANIMATION AND SPECIAL EFFECTS CAMERA STAND

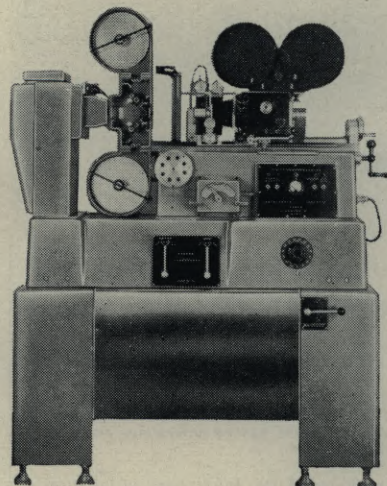
Model No. 111-E

An intelligent approach to today's problems of TV commercials. It is made to serve the multiple tasks of the animation field to take angle shots and zooms, matching zooms, spinning, as well as countless other photographic requirements. We manufacture a complete range of styles and sizes.



### OPTICAL PRINTER FOR SPECIAL EFFECTS WORK

Will print 4 times reduction to 4 times enlargement in one continuous zoom. Complete automatic focus. Many combinations of movement and optical effects available.



WRITE FOR COMPLETE LITERATURE

Headquarters for Professional Photographic Equipment Since 1920

**J. G. SALTZMAN, INC.**  
SALES DISTRIBUTORS for CAESAR MANUFACTURING, INC.  
480 Lexington Avenue, New York 17, N. Y.



## COMPLETE MOTION PICTURE EQUIPMENT

# RENTALS

FROM ONE SOURCE

### CAMERAS

#### MITCHELL

16mm  
35mm Standard  
35mm Hi-Speed  
35mm NC • 35mm BNC

#### BELL & HOWELL

Standard • Eyemo • Filmo

#### ARRIFLEX

16mm • 35mm

#### WALL

35mm single system

#### ECLAIR CAMERETTE

35mm • 16/35mm  
Combination

#### AURICONS

all models single system  
Cine Kodak Special  
Maurer • Bolex  
Blimps • Tripods

#### DOLLIES

Fearless Panoram  
Cinemobile (CRAB)  
Platform • Western  
3 Wheel Portable

### LIGHTING

#### Mole Richardson

Bardwell McAlister

Colortran

Century

Cable

Spider Boxes

Bull Switches

Strong ARC-Trouper

10 Amps 110V AC 5000W-

2000W-750W

CECO Cone Lites

(shadowless lite)

Gator Clip Lites

Barn Doors

Diffusers

Dimmers

Reflectors

### EDITING

#### Moviolas • Rewinders

Tables • Splicers

Viewers (CECO)

#### GRIP EQUIPMENT

Parallels • Ladders

2 Steps • Apple Boxes

Scrims • Flags

Gobo Stands

Complete grip equipment

#### SOUND EQUIPMENT

Magnasync-magnetic film

Reeves Magicorder

Mole Richardson Booms and

Perambulators

#### Portable Mike Booms

Portable Power Supplies to  
operate camera and recorder

WE SHIP VIA AIR, RAIL OR TRUCK

FRANK C. ZUCKER

**CAMERA EQUIPMENT** ©

Dept. A-10-19 • 1600 Broadway • New York City

inked in, or colored one by one to form the words of the title text. This system is most applicable to main titles, although it can also be used for lettering subtitles. Color combinations are easy to achieve and the system affords an easy means of superimposing lettering on art or photo backgrounds, when done on celluloid or glass.

One thing that should be remembered is that hand-lettered titles usually call for title cards larger than those used in the familiar typewriter titler. While it is possible to letter the smaller cards for typewriter titles, a better job results where the cards are 7 by 9 inches in size or larger. One thing in favor of larger title cards is that the ratio of enlargement on the screen is considerably less than with the typewritten title card, with the result that texture of background or errors in alignment are not so noticeable.

With Kodachrome, the predominant cine film in use today, titles must naturally be composed in color. Here contrasts between the letters and background must be watched in order to insure an easy-to-read title on the screen. Black is probably the most acceptable color for lettering over such background colors as yellow, orange, light blue, pale green, and violet. Yellow letters form good contrast with deep blue or scarlet backgrounds. It is well to remember always to choose colors with the greatest ratio of contrast.

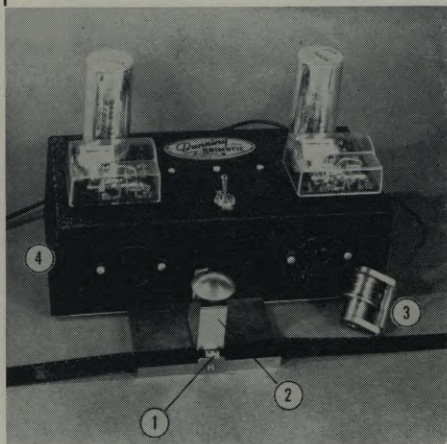
As for color materials for lettering, i. e., inks, paint, etc., the American India Ink Co., makers of the well known Higgins black India ink, also manufactures a wide assortment of colored India inks. These may be applied with either pen or brush and are waterproof. Ordinary blue or black fountain pen ink should never be used as substitute for India ink, where black lettering is called for, because the density of these inks appears much lighter to the camera lens under the intense light of photo-floods.

For the showcard paint brush or Speedball pen, showcard colors will prove one of the best materials for lettering purposes. These colors are easy to apply and dry with an even over-all density so essential to good titles. For use with Speedball pens, some showcard colors must be diluted and this should be done according to manufacturer's directions.

Whether the reader desires to make but a single hand-lettered main title or to do all of his title lettering by hand, it will be time well spent investigating at first hand the lettering methods described here. Remember no artistic ability is required whatsoever to follow these methods. It is for the novice that such lettering devices are made to ease the path of accomplishment.

END

## NO MORE NEGATIVE NOTCHING



### DUNNING MAGIC DOT PRINTER CUEING UNIT

COMPRISES—(1) Supply of high-conductive Anson-made pressure adhesive tape . . . (2) Special punch for cutting, affixing and positioning Magic Dots to film edge . . . (3) Roller contactor to instantly fit Models "D" or "J" B&H printers . . . (4) Electrical control box for activating light change and fader impulses.

Consolidated Film Industries' installation reports "Over 90,000 changes without a miss."

Complete 4-part unit, \$360.00

ANSON RESEARCH CO.

4337 Clybourne, North Hollywood, Calif.

## HAND-LETTERED TITLES

(Continued from Page 597)

with the design of various letters of the alphabet, punctuation marks and numerals, cut out as in a stencil.

The guide is laid on paper and the desired letters formed by following the cut out letter design with pencil or pen and ink. The guide is moved as necessary, in order to bring the required letter stencil in place next to the letter already inked in, and its pattern traced. In other words, in forming the word "AND", the "A" stencil is first traced, then the "N", and so on until all words in the text are traced. Such lettering guides are available from stationery stores and some photographic supply dealers. Prices range from twenty cents up for single guides. A "guide" usually includes all characters of the alphabet in either upper or lower case, punctuation marks, and numerals 1 to 0.

Still another method of producing hand-lettered title text is by tracing the characters from those printed in books especially for the purpose.

In following this method, titles are lettered on either celluloid, glass or tracing paper laid over the characters in the booklet. The letters are traced and



## TRANSITIONS

(Continued from Page 596)

stepping aside from the plot to do it.

Let's imagine that we've shown the man's arrival, his discovery that he's alone, and his inability to return to wherever it was that he came from. He realizes he must make the best of his circumstances—and here, according to our script, we leave him for two months.

At first this might seem fairly straightforward. During the two months the man would, presumably, have built some kind of a dwelling, have organized some method of catching, killing and preparing food, and have made himself as comfortable as possible. So what would be easier than to fade out on him setting to work on his building and fade in on the completed house?

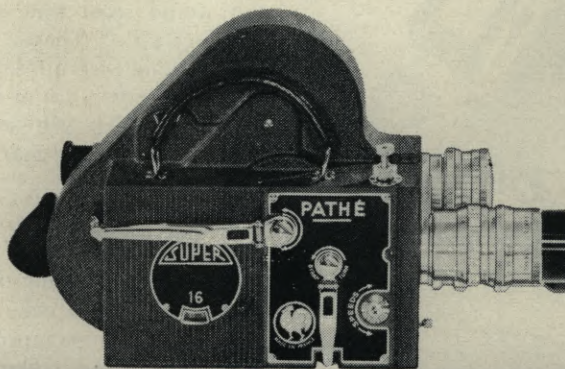
But this job, and the others, might only have taken him a week or a month, and the script insists on "two months later." There may be some important point in the story which demands that this exact period is recognized to have elapsed by the audience.

What could show the date on a desert island? Nothing—unless we revert to the cliché of showing our character writing in a diary. But we've already decided to use something out of the rut. So let's agree that our hero lost his diary, log book and calendar with all his other possessions.

All the same, he might want to keep some account of the passing days. Perhaps he would cut a mark on a tree every morning, grouping the notches in weeks and months. Here is a perfect closeup to open our "two months later" sequence. The groupings would show the period that has passed, and the orderliness of the whole arrangement would at once suggest that our hero has come to terms with his strange conditions. A slow pan from the notched tree past home-made fireplace, oven, larder and garden, coming to rest on the house, would confirm this.

Let's get back to civilization. This time we want to show that two or three years have passed since John wed Betty in the previous sequence, and that the edge of the marriage is becoming pretty

The ONLY 16mm Camera  
under \$1200. with  
**UNIQUE  
EYE-LEVEL  
REFLEX  
VIEWING**



**WEBBO- PATHE**

You see the actual picture  
through the lens . . . while  
you are shooting . . .

**PRECISELY • CLEARLY • PARALLAX FREE**

In flickerless sequence at all shutter speeds.

**NOW!** Individually fitted with factory matched Berthiot lenses  
to meet the most critical professional standards.

### Webbo-PATHE Standard

10mm f1.9 Berthiot Cinor Super-fast,  
super wide angle  
25mm f1.9 Berthiot Cinor normal  
75mm f3.5 Berthiot Cinor telephoto

**Complete \$632.**

### Webbo-PATHE Deluxe

10mm f1.9 Berthiot Cinor Super-fast,  
super wide angle  
25mm f1.5 Berthiot Cinor Super-speed  
normal lens  
75mm f2.5 Berthiot Cinor high-speed  
telephoto

**Complete \$704.**

At Your Dealer or Write for Name of Nearest Dealer



**ROYAL PHOTO  
DISTRIBUTORS**  
78 West 47th St., New York 36, N. Y.

See the Classified Ad "buys" on pages 617-618

**MAIN TITLES • FADES • DISSOLVES • WIPES • SUPERIMPOSURES**

OPTICAL EFFECTS

35mm or 16mm

**MATTES • INSERTS**

Write or Call Ray Mercer

BLACK and WHITE

or COLOR

FOR SPECIAL PHOTOGRAPHIC EFFECTS INFORMATION AND OPTICAL CHART

**RAY MERCER & CO.**

4241 NORMAL AVE., HOLLYWOOD, CALIF. • NORMANDY 3-9331



## Really Portable

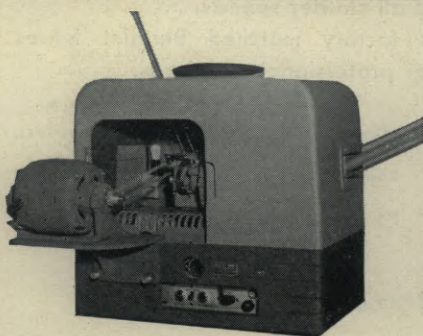
**POWER** for only **\$68.50**

DELIVERS 110 VOLTS 60 CYCLE A.C. FOR CINE-VOICE, ARRIFLEX, AND SIMILAR MOTOR-DRIVEN CAMERAS.



### Filmtronics, Inc.

Dept. A, 96 Huntington St.  
New London, Conn.



### Synchronous Motor Drive for 16mm Projectors

Especially designed to drive all Bell & Howell Ampro and Victor 16mm projectors at Synchronous speed.

The synchronous motor drive can be instantly attached to projector and taken off at any time. No special technical knowledge required for installation and mounting.

The synchronous motor drive is complete with base-plate, Cannon plug for cable and power switch, and a set of reduction gears.

#### Write for more details and prices

Also available on special order. Synch. Motor Drive for all Simplex 35mm portable projectors.

**ONE YEAR GUARANTEE!**

#### Immediate Delivery

Available at leading dealers, or direct.

#### CINEKAD

ENGINEERING COMPANY

500 West 52nd St., New York 19, N.Y.  
PLaza 7-3511

DESIGNERS AND MANUFACTURERS OF  
MOTION PICTURE—TV EQUIPMENT

blunted. The precise length of this period, if it is essential to the situation, can be worked into the dialogue later on quite easily. ("Two years of waiting on you has been quite long enough!") Our problem is to find a quick and appropriate method of linking the wedding with a squabble.

If we think about the principal attributes of every wedding, we may find a tie-up with the future. The bride's dress. H'm. The associations are a bit over-sentimental, perhaps; and the result would seem somewhat corny. The wedding gifts? There's plenty of scope here to fade from present to future with one of the gifts worn or battered through use. But which gift would suggest the deterioration of the marriage by its condition?

There's also the wedding cake. This might be the answer. We could fade from the bride cutting the cake (C. U. of knife slicing into cake) to a C. U. of a slice being unwrapped from its decorative paper and ribbon by a pair of trembling hands. The wife looks at her souvenir nostalgically, bites her lip and suddenly stiffens as her husband calls brusquely from the next room. She re-

turns the slice to its hiding place and hurries through the door.

The romantic association of the cake contrasts with the nervousness of the wife and the curtness of the husband. Time must have passed; just how long the ensuing dialogue will tell. But already our audience knows that things are going unhappily; already they are more sympathetically disposed towards the wife than the husband.

Two months; two years; how about two hours? I've already recommended no smoking, no drinking and no eating. To these I'll add no burning candles, no dripping tapers and no chiming clocks.

Let's try a tough one. Bill accidentally locks himself in a cupboard with an automatic lock. He hasn't got a watch, and there's nothing inside the cupboard to indicate passing time. Yet we want to show that he's in there for a considerable time. When he's let out, his natural reaction would be to bellow, "What's the time?" and then yell, "Hell, I've been in there for two hours!" so once again dialogue will establish the details of the time.

But it's still up to us to show that Bill's in the cupboard more than half-an-hour and less than half-a-day. If we show him dozing off and dissolve to

## Ansochrome Now Available In 16mm

ANSCO's new high-speed color film, Ansochrome, is now being supplied for the first time in 16mm daylight type motion picture film, thus welcoming the movie makers of this nation into the new, fast, color photography fraternity.

Ansochrome movie film has an A.S.A. exposure index of 32 (more than three times as fast as previous cine color films). It is supplied in 50 foot magazines and 100-foot rolls.

Availability of this excellent fast new reversal color material will mean a minor revolution in 16mm cine circles, since it will open new, undreamed of, opportunities for movie making of a quality not attainable with the slower motion picture color films.

Ansochrome film, because of its high speed, allows for better pictures in dimmer light, while at the same time permitting use of smaller lens openings for greater depth of field. This will be appreciated particularly in closeups (such as flower studies), or when using long focus lenses.

The new film's high speed also allows a wider variety of subjects and action to be shot in slow motion at high frame speeds.

Ansochrome, already well established in the still films field, has a wide expo-

sure latitude, unusually high color fidelity through the complete tonal range from brilliant highlights to deepest shadow areas. The pictures get uniformly darker as exposure is decreased; uniformly lighter as exposure is increased; there is no shift in the color balance. This phenomenon is called "color curve conformity".

Thanks to manufacturing innovations, new high speed Ansochrome renders red tones in their true-to-life shades, brilliantly saturated and perfectly recorded. Reds have always been a difficult color to reproduce accurately. The new Ansochrome records reds with high fidelity to the original.

With all its brilliance, new Ansochrome film still has a soft scale of gradation, with delicate rendition of flesh and sky tones. Ansochrome gives natural, true color screen images with detail in shadow areas and extended range into brilliant highlight colors.

Prices of daylight type 16mm Ansochrome cine film are: 50 foot magazines \$6.95, 100 foot rolls \$10.40.

Processing is included in the purchase price and may be done at the Ansco Color Laboratories listed in the instruction sheet supplied with each film package. Exposure information is also given in the instruction sheet.



him waking, there's nothing to indicate that he's been asleep for more than five minutes. Obviously we've got to come outside the cupboard to look for an approximate time indicator.

Bill's dog can help us. He knows where Bill is, and starts snuffling at the cupboard door. He begins to whine, and eventually scratches at the door. Dissolve to the corner of the door covered with scratches. Hardly a speck of paint remains. Pan to the dog, curled up asleep alongside.

Although it's taken some time for the dog to do that door such damage, he's apparently not yet hungry enough to leave the cupboard to look for food. So not many hours have passed. About two, perhaps?

To sum up the lessons these three examples offer: examine the situations both before and after the time lapse; search for a common factor which the passage of time will have affected; and check that it fits the circumstances naturally. Remember, time can pass quickly for the film maker, but it's up to him how gracefully it flies.

## FILMING THE BIRTH OF A NEW AUTOMOBILE

(Continued from Page 595)

tended, the "star"—the single prototype model of the new luxury car that was then available—had many other things to do besides appear before the cameras.

The Wolff Studios task force, Camera-man Arthur Treutelaar, Director James Moore, Production Manager Wallace Stanford, studio vice-president MacDonald MacPherson, who wrote the script, and a crew of ten, began operations in Dearborn in March. The last shot for the 15-minute sound-and-color motion picture was not to be wrapped up until three months later.

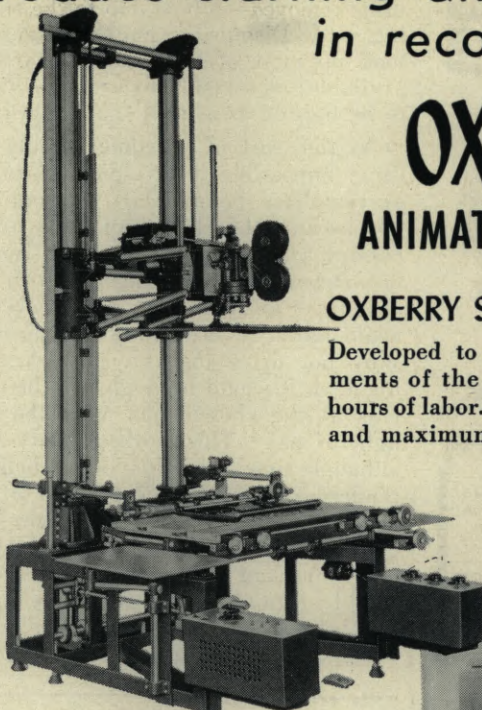
Three years of intensive work, and many more years of intensive preliminary planning by Ford engineers, designers and management, headed by William Clay Ford, president of the Continental division, had gone into the making of the prototype. But before consumer production would be launched, it still had to undergo exhaustive tests. And above all, it must not be seen in public at this time if it could possibly be prevented.

Under these time requirements for testing, the film crew came face-to-face with the catch-as-catch-can prophecy; the need to keep the car from public view—an element the moviemakers hadn't fully appreciated—provided the cloak-and-dagger aura.

When the car could be "borrowed" for photography away from the plant, it first had to undergo masking operations

# Produce startling animation results in record time with

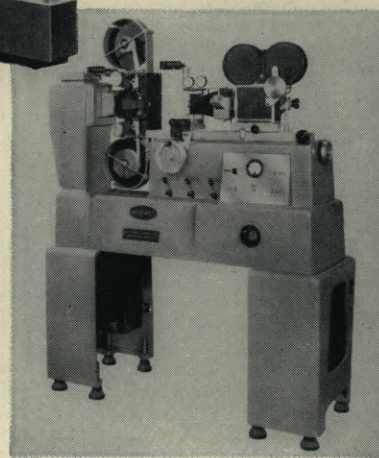
## OXBERRY ANIMATION EQUIPMENT



MODEL ILLUSTRATED  
Height 11'6" • Width 5' • Depth 6'4"

### OXBERRY STAND & COMPOUND

Developed to meet the exacting requirements of the animation industry. Saves hours of labor. Provides complete flexibility and maximum accuracy. Compactly and ruggedly constructed. Automatically coordinates film, camera and platen.



### OXBERRY OPTICAL STEP PRINTER

Designed for special effects and projection printing. Produces blow-ups or reductions, skip framing, push offs and traveling mats. Units are equipped with 35 MM or 16 MM head. Printers to handle TODD A-O VISTA VISION and other processes require special order. Standard models are available in 120 days.

*New*

### OXBERRY COMBINATION 35-16 MM PROCESS CAMERA

Especially engineered for animation stands and optical printers. Now in production, early delivery.

Write for specification sheet.

Each OXBERRY unit is created by an organization experienced in animation problems and devoted exclusively to the production of superior equipment. Also available are registration devices, pegs and punches, cast aluminum drawing and planning boards.

Write today for complete brochure...

**The ANIMATION EQUIPMENT Corporation** 38 Hudson St., Dept. AC 10  
New Rochelle, New York



### PELLEGRINI

VARIABLE SHUTTER UNITS  
FOR THE BOLEX H-8  
AND H-16

The real answer to complete FADES and LAP DIS-

SOVLES. Faster shutter speeds and many other advantages. Prices for all camera models H-8 or H-16 within U. S. \$99.60. Tax extra. One year guarantee and camera transportation back included. Send for free informative booklet. Prices subject to change without notice.

TULLIO PELLEGRINI  
1545 Lombard St.  
San Francisco 23, California



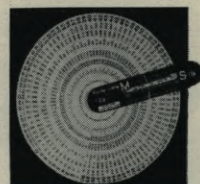
### Ready-Eddy

U. S. Registered Trademark  
FIFTH YEAR—USEFULNESS ACCLAIMED  
BY THOUSANDS—READILY READABLE

1001 Ready Sound-Film  
Editing Data:  
• Footage • Frame  
Count • Screen Time  
• 35mm and 16mm  
equivalents.  
Plastic computer for  
everyone in movies  
and TV, from script to  
screen.

\$2.00 Prepaid  
(Delivered in U.S.A.)

ASK FOR REPRINT OF ARTICLE  
IN AMERICAN CINEMATOGRAPHER.  
Write or ask your dealer  
READY-EDDY, Sandy Hook, Conn.

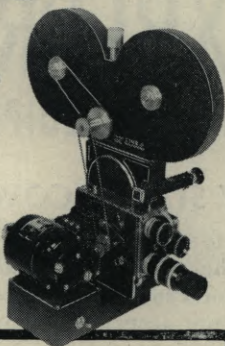




## Now! A 400ft. Magazine For Your BOLEX H-16

Complete  
with  
Synchronous  
Motor  
and Base

Includes  
Installation  
and  
Case



Permits continuous 400 ft. run of 16mm film—the 200 ft. daylight loading spool may be used in the 400 ft. magazine. The 100 ft. spool can be used in the camera without removing external magazine. Fully guaranteed. Can YOU shoot a continuous wrestling match, prizefight or football game? If not write for complete information or see your Bolex dealer.



Ask about our Rack-Over  
and Camera Base.

TOLEDO CINE ENGINEERING  
1309 Milburn Ave. Toledo 6, Ohio

—all its insignia and trim blacked-out with tape, its special chromium wheel-disks removed—for its trip to the shooting site. Disguising and undisguising took up most of the time the car was available; as a result, five minutes came to be figured as a good “shooting day.”

As this sort of schedule rapidly became impossible if this picture was to be completed before Mark II Continentals became the classics of their predecessors, a new idea was evolved. Testing departments usually finished with the prototype at midnight, didn't need it again until 9 the following morning. Why not drive the car, unmasked, at night, so it would be ready for the cameras at the chosen spot with the first light of day? This worked pretty well, although time was often lost when the rendezvous was changed because of traffic conditions. On these occasions “special agents”—company public relations men who had missed a lot of sleep—would be on hand to direct the movie people to the new location.

But even this system met with a sud-

den halt—at a moment when sighs of relief were being drawn following the announcement that a second prototype would be completed within a few days. For two cars should mean that one would be always available for the cameras. There was to be a final midnight drive-away of the original car—then, presumably, the studio people could settle down to a more normal operation. But something happened.

As the prototype pulled up for a stop signal enroute to the rendezvous, it was plowed into by a truck and rendered hors de combat and hors de photography. So when Prototype #2 was completed there was still only one car—and Ford executives rightly would not risk it in further night-time adventures.

But one minute here, five minutes there, a cooperative company, a determined movie crew, and 90 days of catch-as-catch-can shooting finally produced the desired result.

The film “Continental” was ready in time for the announcement of the car, Continental.

## PREPARATION OF 16mm PRINTING LEADERS

(Continued from Page 586)

by boxing off the frame with an ink line and making a large X covering the entire frame, and placing a punch mark in the middle of the frame. Now measure off four more feet of additional white leader and then cut off the excess at the ends.

Next, proceed with identification of the leaders. In order to identify the leaders properly, the white leaders should be placed across the table in front of you, emulsion up, so that the ends of the white leaders will be on your right. It is recommended that all identification be placed on the leaders so that if the original film is held in the left hand, head out, and emulsion out, you can, with your right hand, pull off a foot or two of the leader and read the identification from left to right, right side up, when the emulsion is toward you. The leader identification on the print could also be read correctly when standing in the projectionist's position in front of a standard projector merely by pulling off several feet of the film from the supply reel.

Identification marks on the leaders should be made with a quick drying India ink and on the emulsion side. It is suggested that the word “Head” be placed at the end of the white leader. (Fig. 1.) To the left of this we suggest that you write the type of film and roll identification, such as “Original Kodachrome, A Roll.” To the left preceding this, we suggest that you write the title,

producer's name and the footage. It is recommended that the footage figure used here be measured from the head printer mark to the tail printer sync mark. This is not the billing footage, for to this figure must be added the footage used for head and tail printer thread-up. All footage measurements referring to special effects, timing notes, reprints, etc., should be made from the head printer start marks on the picture rolls.

Similar identification should be marked on the remaining picture leader and on the track leader. We suggest the track read “Head,” type of track such as “Direct Positive” or “Track Print,” “Title,” “Producer's Name” and “Footage.” It is suggested that the start mark be identified in large letters by writing the word “Printer” to the left of the frame and the word “Start” to the right. It is suggested that, in the 25 frames of picture leader between the editorial sync mark and the projection sync mark, should be placed all the identification that is required to be printed through to the final print, such as the “Name of the Show,” “Producer's Name,” and “Screen Time.”

This completes the preparation of the Head Leaders.

**Tail Leaders:** Now to prepare the tail leaders. Splice approximately a 2½-foot piece of black leader to a 6-foot piece of white leader for each roll, as recommended for the head leaders. Place

GEO. W. COLBURN LABORATORY INC.  
164 NORTH WACKER DRIVE • CHICAGO 6  
TELEPHONE STATE 2-7316

**8 and 16mm  
SERVICES**

**Scheibe FILTERS**  
In World-Wide Use

Produce moonlight and night effects in daytime • fog scenes • diffused focus and many other effects.  
Information mailed on request.

USED IN EVERY HOLLYWOOD MOTION PICTURE PRODUCTION

**SCHIEBE FILTERS COMPANY**  
ORIGINATORS OF EFFECT FILTERS  
P.O. Box 46834, Hollywood 46, Calif.



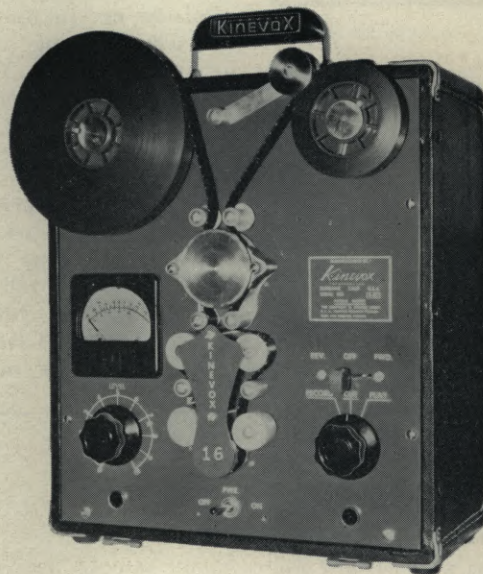
these leaders in the synchronizer so that the splices are opposite each other. Roll forward into the black leader two feet and make crayon marks to indicate where the black leader will be spliced to the picture and sound rolls. Turn the synchronizer back so that the splices are again opposite each other. Then measure into the white leader exactly one foot and establish the editorial sync marks. This is done by placing three small x's lengthwise in a frame of the track and three round dots in the corresponding frame of the picture leaders. Now in the one foot of the white leader on the picture rolls between the editorial sync mark and the black leader we should establish our projection synchronization marks. This is done by counting 26 frames from the editorial picture sync mark forward toward the black leader. Start counting the frame next to the editorial sync mark as number one, then on the 26th frame place two large X's crosswise in the film to indicate the projection sync mark. (See Fig. 2.)

There should be 25 blank frames between the editorial sync mark and the projection sync mark. Now the frame with the small x's in the track is advanced in the synchronizer to a position opposite the frame with the two large X's in the picture, and the rolls are now in "projection" synchronization. With the rolls in this position, measure down two feet from the editorial sync marks toward the end of the leader and establish tail printer sync marks. This frame should be marked off the same as in the head leaders, but it is not recommended that the frame be punched nor identified except by the lab itself. In the event the rolls are being printed from the tail, it would, of course, be necessary to punch these frames and identify with the words "Printer Start." Now measure two more feet of white leader and make crayon marks on all leaders. Remove the leaders from the synchronizer and splice two feet of black leader to each of the leaders at the point marked with the crayon. As recommended earlier, use single-perforated leader for the track and double-perforated leader for the picture. The two feet of black leader at the end of the white leader is used to indicate the tail of the show. Whenever black leader is on the outside of the roll, the roll is then "Tail Out." Identification marking of the tail leaders should now be done. The information to be printed through to the print should be placed in the blank 25 frames on one of the picture rolls between the editorial and projection sync marks. The other identification should be placed in the white leader adjacent to the two feet of black leader at the tail.

You will note that the track and pic-

# NOW!

With Provision for Standard  
10½-Inch 16mm Reels



**\$695<sup>00</sup>**

*All the superior features of the  
KINEVOX Synchronous Magnetic Film Recorder,  
plus the added advantage of easily-attached  
extension arms for standard 16mm reels,  
available as extra equipment,  
at a nominal price.*

## KINEVOX

INC.

116 S. HOLLYWOOD WAY  
BURBANK, CALIFORNIA  
Telephone: VICTORIA 9-3291

*A Collector's Item...*

## Cinematographic Annual

Published in 1930, a limited number of the original editions of this valuable technical book are available to cinematographers, movie amateurs, schools and public libraries.

**600 PAGES OF TECHNICAL ARTICLES**

Printed on fine book paper, containing hundreds of photographic illustrations, and bound in blue leatherette, this book could not be produced today for anywhere near the price asked.

PRICE **\$1.00** POSTPAID

AMERICAN SOCIETY OF CINEMATOPHAGERS

1782 NORTH ORANGE DRIVE

HOLLYWOOD 28, CALIF.



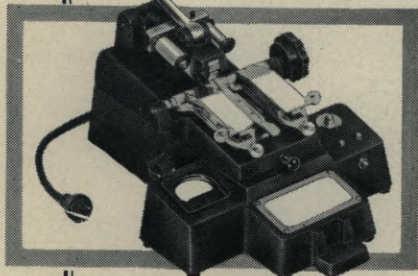


## Miracle PRESTO SPLICER

now available for splicing all kinds of safety film, picture, Magnetic film and Cronar base.

- NO CEMENT
- NO LOST PICTURE
- NO SCRAPING

in 10 Seconds!



### Check these advantages:

- Splices neg or print with no picture loss
- A film fusion (butt-weld), end-to-end, **No Double Thickness**
- No drying, no overlap
- No light required

Literature and sample splice on request

**PRESTOSEAL** MFG. CORP.

3727 33rd st., Long Island City 1, N.Y.

## Video Film Laboratories

is now located at  
**350 West 50th Street**  
**New York 19, N. Y.**

TELEPHONE: JUdson 6-7196



Complete 16mm laboratory service  
for Producers using the  
Reversal Process

Also 16mm Negative and Positive  
developing.



WRITE FOR PRICE LIST

Established 1949

### To Classified Advertisers

Copy deadline for classified advertising is the 15th of month preceding publication date. Mail copy and remittance to cover cost to

**AMERICAN CINEMATOGRAPHER**

1782 No. Orange Dr., Hollywood 28, Calif.

ture leaders will be slightly different in length. This is accounted for by the 26 frame advance for sound.

**Splicing Leaders to the Roll:** Place the matched A&B original picture rolls, emulsion up, in the synchronizer with the accompanying sound track in editorial (even) sync. Turn the rolls in the synchronizer to a point a few frames in advance of the first picture or sound, whichever occurs first. Make marks on corresponding frames on all rolls at this point and then splice on the head leaders at the indicated marks. The head leader identified as "A Roll" should be spliced onto the roll that has the first frame of picture. Roll down to the end of the film to the last picture or sound frame, whichever occurs last. A few

frames beyond this point, make marks on all the rolls and splice on the tail leaders at this point.

Preparing standard leaders in advance and then splicing them to the rolls when the rolls are in editorial synchronization practically eliminates the possibility of error, either by the editorial department or by the lab.

It is recommended that the use of the old so-called "Academy Leader" be discontinued. If the film is to be used on television, or if the client wishes to have leaders with cue numbers, then it is recommended that the SMPTE "Society Leader" be used. The Society Leader will then, of course, precede the picture and the two feet of black leader will not be necessary. **END.**

## CINEMASCOPE ON 55mm FILM

(Continued from Page 583)

55mm camera does not mean that our 35mm cameras are to be discontinued.

"Nor will our swing to production on 55mm film affect the more than 30,000 CinemaScope installations in theatres throughout the world. On the contrary, use of the new camera and larger negative will result in a great increase in the pictorial quality of our productions, when the 55mm negative is reduced to 35mm for projection in conventional CinemaScope theatres.

"While some 'showcase' theatres will be equipped with 55mm projectors and custom-tailored screens, plus additional sound equipment to utilize a newly-developed seven-track stereophonic sound system, this will be for the purpose of obtaining the ultimate in theatre presentation. The screen aspect ratio will remain unchanged.

"Twentieth Century-Fox regards the present ratio of 2.55-to-1 as eminently satisfactory for viewing, audience participation and story-telling purposes. When the new seven-track stereophonic

sound system is made available, the only expense involved to theatre owners will be a minor cost for new projector heads and for additional speakers back of the screen.

"The new seven-track stereophonic sound system will utilize five horns placed in pre-determined positions behind the screen. Of the remaining two tracks, one will serve as a control track and the other a special sound speaker."

Whereas present CinemaScope equipment has greatly improved the viewing of pictures in theatres from any position, the new lenses and wide film that will be used in exhibiting films in the road show houses, Halprin said, will show another great improvement in definition and depth, and will make it possible to view the screen in comfort from any seat in the house, including the front row.

"It will bring audiences the nearest thing to stereoscopic viewing so far achieved without the need for viewing glasses," Halprin concluded.

## THE SUPERSCOPE PROCESS

(Continued from Page 591)

eventually all wide-screen motion picture production, however photographed, will revert back to 35mm for release prints.

The Tushinsky brothers have designed a system of lenses that can be installed on a printer to take any negative and print it in any aspect ratio within 35mm limitations. The process will turn out anamorphic prints from a straight 35mm negative as well as from double-frame negatives or any large-area negative of the future. It is gen-

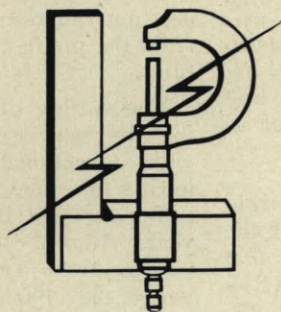
erally conceded that for wide-screen presentation, anamorphic prints possess unique and definite advantages which could be the subject of a complete article by itself.

After an extensive survey of the physical limitations of theatres throughout the country, the developers of Superscope decided that an aspect ratio of 2-to-1 is the most ideal. This fitted perfectly into their plans for producing anamorphic prints from 35mm negatives, Irving Tushinsky says, because it al-



## PRECISION SOUND READERS

Look for  
this  
trademark



**FEATURES:** Simple threading . . . polished stabilizer drum with needle bearings, with a surface which cannot damage film . . . film rollers machined to conform with SMPTE standards, and equipped with oilless bearings . . . precision ground shafts . . . dimension 6x6x7 1/2 inches.

**AMPLIFIER:** 117 volt—60 cycle—AC . . . power output—4 watts . . . heavy duty Alnico V speaker . . . safety fused . . . prefocused socket . . . pilot light . . . 6 ft. heavy duty cord.

All Prices F. O. B. Factory, Brooklyn, New York

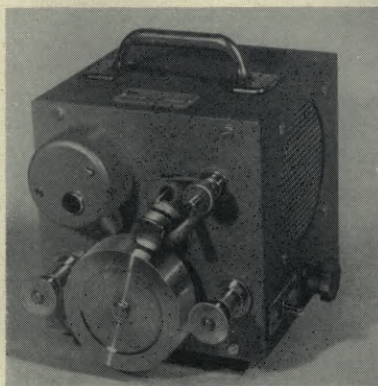
Write for Literature

**PRECISION LABORATORIES**

1130 UTICA AVENUE

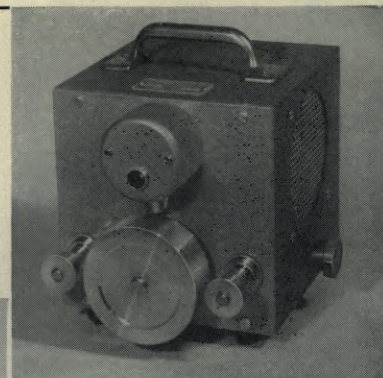
BROOKLYN 3, NEW YORK

It is your guarantee  
of the finest in sound  
editing instruments.



**OPTICAL-MAGNETIC**

Model 800.....16mm, 35mm & 1/4 inch  
NET PRICE \$259.50

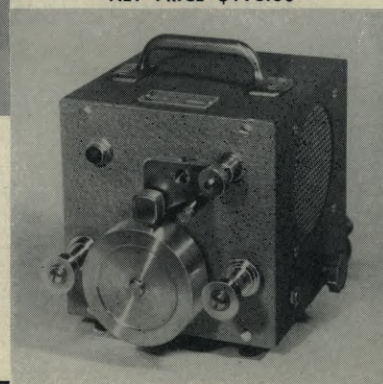


**OPTICAL**

Model 600.....16mm and 35mm  
NET PRICE \$185.00

**MAGNETIC**

Model 700.....16mm, 17.5mm, 35mm  
and 1/4 inch  
NET PRICE \$198.00



lowed them to use the full width of the negative area and also to use a vertical dimension that is well within the standard practice of good photography.

One of the bugaboos encountered in working with wide-screen is the problem of retention of depth of field. This long has been a stumbling block to lens designers because it demands a compromise with quality in designing a lens that will have increased light-gathering potentials and the ability to cover wide areas.

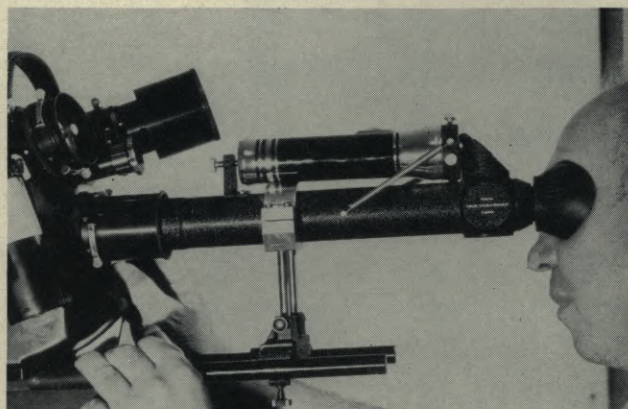
In photography, when the camera is placed close to a subject, there is alarming drop-off of depth of field, which can only be minimized by stopping down the lens. This in turn means using more light, thus increasing production costs.

In shooting for Superscope, using normal camera procedure we are able to pull back so that the amount of vertical coverage is reduced to conform with the aspect ratio of the release print (cropping top and bottom of the finder image as shown in Fig. 2, Page 591). This amounts to a dimension of .490" of vertical height in the negative area. Depth of field is also increased without need for raising the set lighting level.

I should like to emphasize here that shooting for Superscope does not involve any costly accoutrements nor require increased light levels in set illumination. However, there is always the important

## TAYLOR-HOBSON *Auto-Collimator*

for  
checking  
lens  
accuracy . . .



The Camera Focus Auto-Collimator enables the Camera Operator to carry, as an entirely self-contained and self-checking unit, an instrument to set the camera lens in a focus at infinity. Thus any Cameraman can check, instantly, the accuracy of the infinity scaling of any lens in use, by means of this instrument. THERE IS NO NEED TO SHOOT, DEVELOP, AND SCREEN TEST FILMS—THE AUTO-COLLIMATOR DOES IT ALL—INSTANTANEOUSLY.

**\$375.00** NET

F.O.B. Hollywood

It is impossible to exaggerate the value of this instrument to the Camera Operator—its small size, accuracy, light weight, easy portability, and above all, its simplicity of manipulation make it an absolute "must" for every Camera Department.

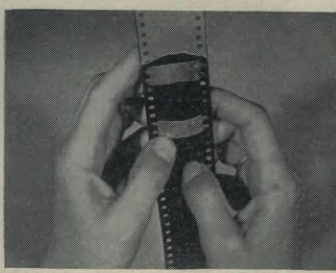
**BENJAMIN BERG CO.**

1410 NORTH VAN NESS AVENUE

HOLLYWOOD 28, CALIF.







It's easy with the  
**MERCER FILM PATCH**  
 Descriptive Chart & Price List  
 Mailed on Request  
**R. C. MERCER & COMPANY**  
 4241 Normal Ave., Hollywood 29, Calif.  
 MOrmandy 3-9331

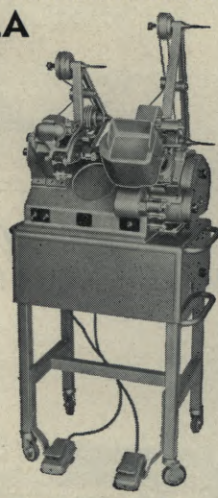
**MOVIOLA**

FILM EDITING  
 EQUIPMENT  
 16MM - 35MM

- PICTURE SOUND Photo and Magnetic
- SYNCHRONIZERS
- REWINDERS

One of the new series 20 Moviolas for picture and sound.

Write for Catalogue



**MOVIOLA MANUFACTURING CO.**  
 1451 Gordon St. • Hollywood 28, Calif.

**RUBY CAMERA EXCHANGE**  
 Rents . . . Sells . . . Exchanges

Everything You Need for the  
**Production & Projection**  
 of Motion Pictures Provided  
 by a Veteran Organization  
 of Specialists

35 mm. . . . 16 mm.  
 Television

IN BUSINESS SINCE 1910

729 Seventh Ave., New York 19, N. Y.  
 Tel.: Circle 5-5640  
 Cable address: RUBYCAME

## THE SUPERSCOPE PROCESS

(Continued from Page 611)

consideration in any wide-screen presentation that the photography be sharp and exposure correct for laboratory requirements. Use of only the very best of lenses on the camera and careful attention to focusing and exposure are therefore paramount factors.

Being able to shoot with the conventional Mitchell camera, we retain all the conveniences of camera mobility that cameramen have become accustomed to over the years. In other words, in the course of a day's shooting and using a normal complement of standard lenses, we are able to move the camera during a shot without any limitations whatever imposed by the Superscope process. The mobile camera is still considered one of the director's most important cinematic tools. The Tushinsky's Superscope pro-

cess puts no restrictions on this mobility in the production of wide-screen pictures.

The editing of the "Glory" negative for the Superscope process was done with conventional equipment and by following the same procedure that has become standard in Hollywood over the years. After the negative was edited, it was sent to Technicolor Corporation where the .490" x .980" picture area was converted to an anamorphic print with a "squeezed" picture area of .715" x .715". (See film reproductions on Page 591.) These anamorphic prints can be projected in theatres, using CinemaScope or Superscope projection lenses, or any other anamorphic projection lens now in use.

## ANIMATION IN PRODUCTION OF TV FILMS

(Continued from Page 589)

turned out, Chad cut production time to 4 months. Ink and paint work was reduced to a minimum. Backgrounds were designed to permit maximum use of camera pans and cutout models. Certain ideas were put across graphically through highly stylized characters. An example of this involved a skunk character that symbolized the foul smell given off by cheap competitive gasolines. An animation sequence pictured a feminine driver filling up at a pump bearing the skunk label, then the skunk rode the back seat of the car all the way home and finally set up permanent quarters in the family garage.

Still another interesting thing accom-

plished in this film involved camera shots to match a word story describing Gulf's super-refining process that eliminates the impurities which otherwise leave deposits in high-compression engines. A long vertical cel was used, and on it a stream of oil flowed downward with several twists and turns. The stream was broad at the top and narrow at the bottom; so, by panning the camera north to south and using multi-cel animation the effect was exceptionally realistic.

Dissolves, wipes, zooms and pop-ons were used in the transitions from cel to cel as the discussion covered cylinder combustion, quick starting, fuel-saving

## Telephoto Shots With Binoculars



**BINOCULARS** serve dual purpose in this adaptation of an old movie amateur idea. Bushnell Bino-Photo Unit facilitates mounting binoculars before movie or still camera lenses for making telephoto shots. One side of glasses serves as finder. Special bracket holds glasses in correct position, properly centered for distortionless results. Camera lens power is multiplied 700 times. Normal 1/2-inch 8 mm camera lens becomes 3 1/2-inch lens; normal 1-inch 16mm camera lens, a 7-inch telephoto. When binoculars are needed, simply detach from camera.



Film Editing Made Easy  
with NEW

## professional film viewer

for 16mm film

*Every film editor will appreciate a viewer that enables him to view his film from left to right—on a large, brilliantly illuminated screen.*

*The PROFESSIONAL FILM VIEWER makes film editing a breeze. Easy threading, portable, will not scratch film. Put this viewer between your rewinders and speed up your editing. Size of Viewing Screen 6"x 4".*



Price—\$350  
Counter additional \$100

FRANK C. ZUCKER  
**CAMERA EQUIPMENT CO.**

DEPT. A-10-4 1600 BROADWAY, NEW YORK CITY

warm-up, extra gas mileage, and stop-and-go around-town cruising. Cel drawings for these important points showed respectively a cross-section of a cylinder, a car zipping away from a filling station, a close-up of speedometer showing pointer rising rapidly, a close-up of fuel gauge showing pointer at full, and close-up of stop light changing from red to green.

The film also described certain so-called nightmares: carburetor icing, vapor lock, corrosion, and obnoxious odor. The four nightmares were first pictured as horses with hooded riders and moving through the clouds. Then, as the troublesome subjects were treated individually, each horse was shown in clouds of different colors—blue for carburetor icing, red for vapor lock, rust for corrosion, and black for odor.

Since the installation of the Oxberry equipment, the Chad organization has employed multiplane techniques in combination with stop-motion to produce exceptional three-dimensional animated effects. Multiplane technique permits use of as many as six planes of pictorial matter—some supported above the compound table on wood, others on glass. An example of how this technique is successfully employed is a 60-second TV commercial which the company recently produced for Nucoa Margarine.

(Continued on Page 618)

*Charles Ross* INC.

EVERYTHING FOR  
EASTERN PRODUCTION

- LIGHTING -  
GRIP EQUIPMENT  
PROPS - GENERATORS  
DOLLIES - MICROPHONE BOOMS

(Catalogs Upon Request)

333 WEST 52nd ST.



N.Y. 19, N.Y. CI 6-5470



# HOLLYWOOD STUDIO PRODUCTION

Feature and television film productions for which members of the American Society of Cinematographers were engaged as Directors of Photography during the past month.

## AMERICAN SOCIETY OF CINEMATOGRAPHERS

ARTHUR MILLER, President  
SOL HALPRIN, First Vice-President  
WILLIAM SKALL, Second Vice-President  
ALFRED GILKS, Third Vice-President  
WALTER STRENCE, Treasurer  
CHARLES G. CLARKE, Secretary  
ROBERT DE GRASSE, Sergeant-At-Arms

## BOARD OF GOVERNORS

JOSEPH BIROC  
GEORGE FOLSEY  
BURNETT GUFFEY  
WINTON HOCH  
HAL MOHR  
RAY RANNAHAN  
LEON SHAMROY  
PHILIP TANNURA

## ALLIED ARTISTS

- ELLSWORTH FREDERICKS, "The Friendly Persuasion," (Eastman Color, Wide-screen) with Gary Cooper, Dorothy McGuire, Marjorie Main. William Wyler, producer-director.
- FREDERICK GATELY, "The Four Seasons," (Color, Wide-screen) with David Wayne, Keenan Wynn, James Barton, Jim Backus, Myrna Dell. Josef Shafte, producer-director.

## COLUMBIA

- RAY JUNE, "Tambourine," (Technicolor, CinemaScope) with Jane Russell, Cornel Wilde, Luther Adler, Joseph Calleia, James Russell. Nicholas Ray, director.
- CHARLES LAWTON, "Jubal Troop," (Technicolor; CinemaScope) with Glenn Ford, Ernest Borgnine, Rod Steiger, Valerie French, Felicia Farr, Basil Ruysdael, Noah Berry Jr., Delmer Daves, director.
- HARRY STRADLING, "The Eddie Duchin Story," (Technicolor; CinemaScope) with Tyrone Power, Kim Novak, James Whitmore, Rex Thompson. George Sidney, director.
- CHARLES LANG, JR., "The Way We Are," (Wm. Goetz Prod.) with Joan Crawford, Cliff Robertson, Vera Miles, Lorna Greene, and Ruth Donnelly. Robert Aldrich, director.
- BURNETT GUFFEY, "Storm Center," with Bette Davis, Kim Hunter, Brian Keith, Joe Mantell, Paul Kelly. Dan Taradash, director.

## METRO-GOLDWYN-MAYER

- ARTHUR ARLING, "I'll Cry Tomorrow," with Susan Hayward, Richard Conte, Eddie Albert, Don Taylor, Jo Van Fleet. Daniel Mann, director.
- RUSSELL HARLAN, "The Last Hunt," (Eastman Color; CinemaScope) with Robert Taylor, Stewart Granger, Lloyd Nolan. Richard Brooks, director.
- ROBERT SURTEES, "Tribute To A Bad Man," (Eastman Color; CinemaScope) with James Cagney, Stephen McNally, Irene Papas, Don Dubbins. Robert Wise, director.
- ROBERT PLANCK, "Gaby," (Eastman Color, CinemaScope) with Leslie Caron, John Kerr,

Sir Cedric Hardwicke, Taina Elg, and Margalo Gilmore. Curtis Bernhardt, director.

- ARTHUR ARLING, "Fearful Decision," (Wide-Screen) with Glenn Ford, Donna Reed, Leslie Nielsen, Juano Hernandez, Robert Keith. Alex Segal, director.
- JOSEPH RUTTENBERG, "The Swan," (Eastman Color, CinemaScope) with Grace Kelly, Alec Guinness, Louis Jourdan, Brian Aherne, Agnes Moorhead. Charles Vidor, director.

## PARAMOUNT

- LOYAL GRIGGS, WALLACE KELLEY, PEVERELL MARLEY, "The Ten Commandments," (VistaVision, Technicolor), with Charlton Heston, Anne Baxter, Yul Brynner, et al. Cecil B. De Mille, director.
- DANIEL FAPP, "The Birds and the Bees," (Technicolor, VistaVision), with George Gobel, Mitzi Gaynor. Norman Taurog, director.
- FRANZ PLANER, "The Mountain," (Technicolor, VistaVision) with Spencer Tracy, Robert Wagner, Claire Trevor, Richard Arlen, William Demarest. Producer-director, Edward Dmytryk.
- LOYAL GRIGGS, "That Certain Feeling," (Technicolor, VistaVision) with Bob Hope, George Sanders, Eva Marie Saint, Pearl Bailey, David Lewis and Al Capp. Producers-directors, Norman Panama and Melvin Frank.

## R.K.O.-RADIO

- WILLIAM SNYDER, "Great Day In The Morning," (Technicolor; Superscope) with Robert Stack, Virginia Mayo, Ruth Roman, Alex Nicol, Raymond Burr. Jacques Tourneur, director.

## TWENTIETH CENTURY-FOX

- LEON SHAMROY, "Good Morning, Miss Dove," (Color; CinemaScope) with Jennifer Jones, Robert Stack, Kipp Hamilton, Robert Douglas, Peggy Knudson, Biff Elliott, Mary Wickes, Chuck Connors. Henry Koster, director.
- MILTON KRASNER, "Rains of Ranchipur," (Color; CinemaScope) with Lana Turner, Richard Burton, Fred MacMurray, Joan Caulfield, Michael Rennie, Paul H. Frees. Jean Negulesco, director.
- CHARLES CLARKE, "Carousel," (Color; CinemaScope) with Frank Sinatra, Shirley Jones, Barbara Ruick, Cameron Mitchell, Claramae Turner, Audrie Christie, Robert Rounseville. Henry King, director.
- LEO TOVER, "The Lieutenant Wore Skirts," (Color; CinemaScope) with Tom Ewell, Sheree North, Les Tremayne. Frank Tashlin, director.
- JOE MACDONALD, "Threshold of Space," with Guy Madison, John Hodiak, Virginia Leith, Dean Jagger and Warren Stevens. Robert Webb, director.
- LEE GARMES, "Bottom of the Bottle," (Color, CinemaScope) with Van Johnson, Joseph Cotton, Ruth Roman, Jack Carson, Brad Dexter. Henry Hathaway, director.

## UNIVERSAL-INTERNATIONAL

- HAROLD LIPSTEIN, "Pillars in the Sky," (Technicolor; CinemaScope) with Jeff Chandler, Dorothy Malone, Keith Andes, Ward Bond. George Marshall, director.

## WARNER BROTHERS

- WILLIAM MELLOR, "Giant," (Warnercolor) with Elizabeth Taylor, Rock Hudson, James Dean, Jane Withers. George Stevens, director.
- SAM LEAVITT, "The Court-Martial of Billy Mitchell," (Warnercolor, CinemaScope), with Gary Cooper, Ralph Bellamy, Fred Clark, Herbert Heyes. Otto Preminger, director.
- EDWIN DUPAR, "The Lone Ranger," (Warner-Color) with Clayton Moore, Jay Silverheels, Bonita Granville, Lyle Bettger, Robert Wilke, Perry Lopez, and Michael Ansara. Stuart Heisler, director.
- IRVING GLASSBERG, "Gun Shy," with Jock Mahoney, Martha Heyer, Lyle Bettger, Ted de Corsia. Charles Haas, director.
- RUSSELL METTY, "Congo Crossing," (Technicolor) with Virginia Mayo, George Nader, Peter Lorre and Michael Pate. Joseph Pevney, director.
- JOSEPH LASHELLE, "Our Miss Brooks," with Eve Arden, Robert Rockwell, Jane Morgan, Gale Gordon, Gloria McMillan, Richard Crenna. Al Lewis, director.
- HANS KOENEKAMP, "The Old Man of the Sea," (Warner Color, CinemaScope) with Spencer Tracy.
- J. PEVEREL MARLEY, "Serende," (Warner-Color) with Mario Lanza, Joan Fontaine, Sarita Montiel, and Vincent Price. Anthony Mann, director.
- HAL ROSSON, "The Bad Seed" with Nancy Kelly, Patty McCormack, William Hopper, Evelyn Varden, Mervyn LeRoy, producer-director.

## INDEPENDENT

- LIONEL LINDON, "Around the World in 80 Days," (Michael Todd Prods.; Todd-A-O) with David Niven, Cantinflas, Luis Dominguin.
- ALAN STENSVOED, "Please Murder Me," (Gross-Krasne Prod.) with Angela Lansbury, and Raymond Burr. Peter Godfrey, director.
- CHARLES BOYLE, "The Great Locomotive Chase," (Technicolor, CinemaScope) with Fess Barker, Jeff Hunter, Jeff York, John Lupton, Claude Jarman. Francis D. Lyon, director.

## TELEVISION

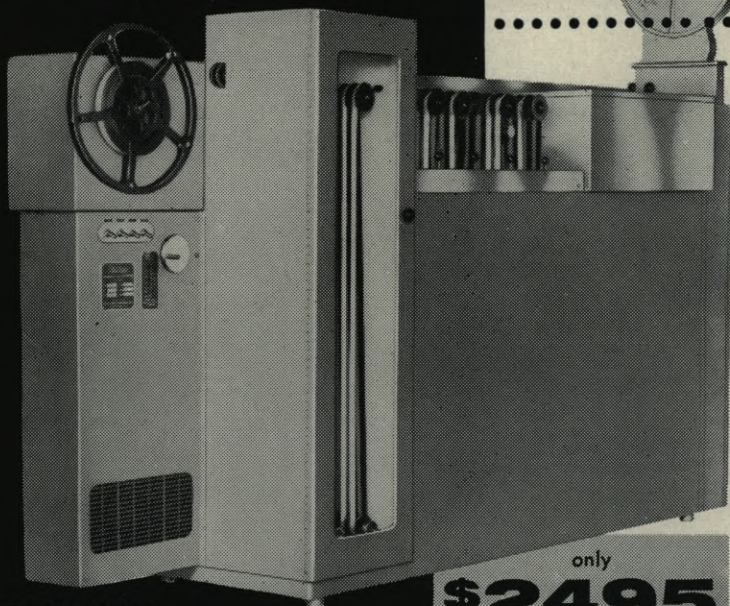
(The following directors of photography were active last month in photographing films for television in Hollywood, or were on contract to direct the photography of television films for the producers named.)

- FLOYD CROSBY, "TV Reader's Digest" (Alpha).
- ALLAN STENSVOED, "Dr. Hudson's Secret Journal (Author's).
- KARL FREUND, "December Bride," (Desilu), "The Jimmy Durante Show" (Desilu), "I Love Lucy" (Desilu).
- NICK MUSURACA, "The Lineup" (Desilu).
- ROBERT DEGRASSE, "Make Room For Daddy" (Marterto-Desilu), "It's Always Jan" (Janard-Desilu).
- HAROLD WELLMAN, "Wyatt Earp" (616-Desilu).
- WALTER STRENCE, "This is the Life" (Family Films).
- VIRGIL MILLER, "You Bet Your Life" (Filmcraft).
- ERNEST MILLER, "Gunsmoke" (Filmaster).
- WILLIAM BRADFORD, "Adventures of Champion" (Flying-A).
- LESTER WHITE, "Navy Log" (Gallu).



# FAST!

develops reversal film at 1200 ft. per hr.  
negative-positive film at 1200 ft. per hr.



- SIZE: 76"x50"x24"
- WEIGHT: Approx. 475 lbs.

WRITE FOR FULL DETAILS AND LITERATURE

only  
**\$2495**

F.O.B. Milford, Conn.

## MODEL R-15 REVERSAL FILM PROCESSOR

Ideal for TV, Industry, Colleges

**NEW EXCLUSIVE OVERDRIVE** eliminates film breakage, slack build-up, automatically compensates for film elongation.

**NEW Design Concept!** Units removable for cleaning — eliminates maintenance.

**NEW Simplicity of Operation!**

**NEW Complete Daylight Operation!** No darkroom. Removable daylight magazine.

**NEW Quality Throughout!** Heavy gauge stainless steel tanks. Filtered air intake.

**Filmline corp.** Milford, Conn.

STUART THOMPSON, "Lassie" (Maxwell).  
PHIL TANNURA, "The Burns and Allen Show" (McCadden).  
HARRY WILD, "Bob Cummings Show" (McCadden).  
JAMES VAN TREES, "The People's Choice" (McCadden).  
HENRY SHARP, "Sheena, Queen of the Jungle" (Nassour).  
JACK MCKENZIE, "Frontier" (Outpost).  
LUCIEN ANDRIOT, "It's A Great Life" (Raydic).  
LATHROP WORTH, "The Great Gildersleeve" (Roach).  
GILBERT WARRENTON, "Sergeant Preston of the Yukon" (Skinner).  
LLOYD AHERN, "My Friend Flicka" and "Cavalcade" (TCF).  
GUY ROE, "Gangbusters" (Visual).  
KENNETH PEACH, "Fury" and "The Count of Monte Cristo" (TPA).  
CARL GUTHRIE, "Cheyenne" and "King's Row" (Warners).  
HAROLD STINE, "Casablanca" (Warners).  
HAROLD MARZORATI, "MGM Parade" (MGM).  
DAN B. CLARK, "People Are Funny" (Guedel).  
WILLIAM A. SICKNER, "Medic" (Medic).  
MACK STENGLER, "Ina Ray Hutton Show" and "It's Fun To Reduce" (Guild).  
NORBERT BRODINE, "The Loretta Young Show" (Lewislol).

## CRAIG BIG SCREEN MOVIE VIEWER



- Large (3¼ x 4¼ in.) hooded screen
- Flat field projection lens and ground & polished condenser lens
- Rotating optical prism shutter
- Stainless steel film guide
- Left to right film travel
- Automatic lamp switch
- Built-in frame marker
- Focusing and framing adjustments
- 75 watt projection lamp

**\$49.50** for 16 mm. or 8 mm. model

No need to darken the room when you use this brilliant *big screen* Craig Movie Viewer. Ideal for viewing or editing motion pictures or TV films. Easily set up with Craig or other standard rewinding equipment. Craig complete editing equipment is made in two models:

**CRAIG PROJECTO-EDITOR**—Portable motion picture viewer and editing outfit weighing 10½ pounds. Consists of Craig Viewer illustrated

above, Take-up and Rewind Reel Spindles, Craig Master Splicer, Craig #7 Film Cement, and Carrying Case. 16 mm. or 8 mm. model, \$79.50 complete.

**CRAIG PROFESSIONAL EDITING EQUIPMENT**—Consists of Craig Viewer, Craig Master Rewinds which accept 2000 foot reels, Craig Master Splicer, hardwood mounting board, and Craig Formula #7 Film Cement. 16 mm. model only, \$79.50 complete.

Write for illustrated literature, KALART, PLAINVILLE, CONN. DEPT. AC-10

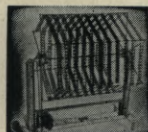


## Automatic Daylight Processing



### DEVELOPING TANK

- Processes up to 200 Ft.
- 8mm-16mm-35mm
- Movie—X-Ray—Microfilm
- Motor driven portable
- Tough plastic tanks
- Uniform Density Assured
- 70mm tank also available



### FILM DRYER

- Motor driven—Heated
- Speedy drying
- Automatic shrinkage allowance
- Stainless steel and aluminum construction
- Easily assembled without tools
- Compact, Portable

Guaranteed. Write for Free Literature.  
**Micro Record Corp.** Dept. AC  
 487 South Ave.  
 Beacon, N. Y.



## Reversal PROCESSING

Reversal specialists for over a decade. Our long experience insures superior quality. Electronically controlled machines keep temperature constant within .2 of one degree. National "Brilliantone" Cine prints are the finest available. Write for free catalogue.

CONTACT PRINTING B & W DUPLICATING  
 WORK PRINTS KODACHROME DUPLICATING  
 EDGE NUMBERING VACUUMATING

All work vaporized at no extra charge

### NATIONAL CINE LAB

Box 4425 Washington 17, D. C.

## AMERICAN CINEMATOGRAPHER HANDBOOK

for the  
**PROFESSIONAL and AMATEUR**  
 by  
**JACKSON J. ROSE, ASC**

New data on Cinerama - Television photography - Background Projection - Zoom Lenses - Underwater Photography - Latensification - "T" Stops - Ansco Color - Eastman Color - DuPont Color - Cameras - Projectors - Lenses - Filters - Charts - Tables - Ratings - Diagrams - Systems - Equalizers - Formulas, Etc.

**THE ONLY HAND BOOK OF ITS KIND**

PRICE **\$5.00**

(California buyers please add 18c sales tax)

Book Department,  
 American Cinematographer,  
 1782 No. Orange Dr.,  
 Hollywood 28, Calif.

Gentlemen: Enclosed please find \$5.00\* for which please send me a copy of THE AMERICAN CINEMATOGRAPHER HANDBOOK AND REFERENCE GUIDE.

Name.....

Address.....

City.....Zone.....State.....

\*If you live in California, please include 18c sales tax — total \$5.18.

## BULLETIN BOARD

(Continued from Page 576)

successors will continue to market and service the Kinevox recorder and all items of associated equipment, according to Roos.

**Joseph Brun, A.S.C.**, now in Paris, has been signed to direct the photography, in Eastman Color and CinemaScope, of an untitled feature for Lutetia Films to be produced at Saint Maurice Studio. Starred will be Brigitte Bardot, France's explosive new screen star.

**Sam Leavitt, A.S.C.**, is teamed again with producer-director Otto Preminger for "The Man With The Golden Arm." Picture went into production at RKO Studio in Hollywood on September 23rd and stars Frank Sinatra, Eleanor Parker and Kim Novak. Leavitt directed the photography of Preminger's noteworthy "Carmen Jones."

**To Alfred Gilks, A.S.C.**, went the distinction of being the cameraman selected by the Screen Director's Guild to direct the photography of the Guild's initial television film production, "Meet The Governor," starring Herb Shriner.

**Ray Foster**, who was re-admitted to membership in the A.S.C. recently, has been signed to direct the photography of a series of 39 half-hour television films. Last month he photographed a TV pilot film for Stuart Hamblin for a proposed "Cowboy Church of the Air" series.

## WHAT'S NEW

(Continued from Page 570)

### Anti-Glare Spray

Crescent Aquanon anti-glare spray is a product of Crescent Portrait & Frame Co., 14068 Euclid Ave., East Cleveland 12, Ohio. Product is water-soluble. It can be wiped off reflective objects such as band instruments, plastics and jewelry after use, promising motion picture and TV cameramen quick, easy relief from troublesome highlights.

Dispensed at the push of a button from an aerosol self-spraying container, product is non-inflammable. List price is about \$2.25 for a 12-oz. container.

### Lens Converters

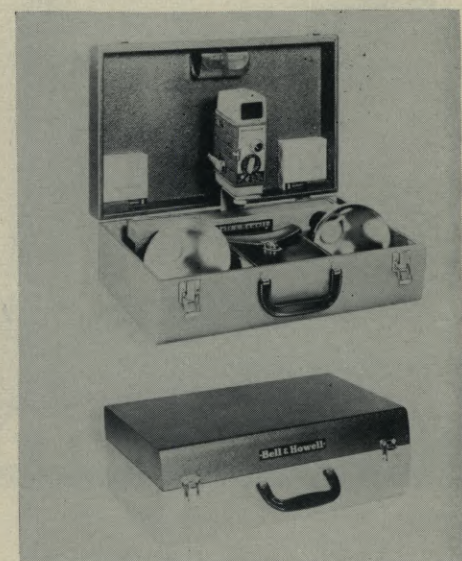
Eastman Kodak Company, Rochester, N. Y., offers a line of telephoto and wide-angle lens converters for use with both the f/2.7 and f/1.9 Brownie Movie Cameras.

Telephoto converter gives advantage of an effective 24mm lens or approximately a two times telephoto effect. The wide-angle converter gives the advantage of an effective 9mm wide-angle lens.

The converters are not interchangeable lenses, but are attached by the user over the regular camera lens. List price is \$18.50 each.

### Deluxe Carrying Case

Just introduced and free to purchasers of Bell & Howell 8mm matched camera sets is a new, sturdy carrying case for cine equipment. Constructed of



durable, laminated plywood, new case has mar-proof, scuff-resistant two-tone wrinkle finish.

Fitted inside, as shown in cut, are a Wilshire 8mm camera, a leather camera case and a Bell & Howell light for indoor movie making. A leather case in the lid holds a 2½-X telephoto lens attachment, a filter holder and retaining ring. Space is provided for two 50-foot rolls of film. The complete outfit retails for \$89.85.

### New Ownership For Kinevox, Incorporated

James M. Johnson and F. Kirk Johnson, of Ft. Worth, Texas, have purchased Kinevox, Inc. from Len and Sylvia Roos. Company, which long has manufactured a popular line of magnetic recording equipment is to be expanded and firm name changed to Electromation Co., Inc.

Company will continue to manufacture and distribute Kinevox recorders and associated equipment and already has announced many improvements, including removable and interchangeable set of reel or spool holders accommodating up to 2000 feet of recording film.



# CLASSIFIED ADVERTISING

**RATES:** Ads set in lightface type, 10c per word; minimum ad, \$1.00. Text set in lightface capital letters (except 1st word and advertiser's name) 15c per word. Modified display format (text set in boldface type, capitals or upper-and-lower case) 90c per line. Send copy with

remittance to cover payment to Editorial Office, American Cinematographer, 1782 No. Orange Drive, Hollywood 28, Calif. Forms close 15th of month preceding date of issue. No discount on Classified Advertising.

## STUDIO & PROD. EQUIP.

**30TH ANNIVERSARY—S.O.S. SALE OF SALES**  
MITCHELL 16 CAMERA w/3 Baltar Lenses; 2—400' magazines; 12V motor; 35mm Mattebox sunshade; carrying cases. Barely used .....\$2995.00  
HOUSTON FEARLESS PERAMBULATOR DOLLY, \$2100 value ..... 1295.00  
CAMERETTE 35mm REFLEX w/3 Kinoptik Lenses; 3 magazines; battery motor; 110AC motor; extension tubes; automatic focus changer. Excellent ..... 2750.00  
TIME LAPSE INTERVAL Meters for Bolex and Cine Special, compl. .... 146.00  
AKELEY AUDIO SOUND CAMERA, 6 fast lenses; 3 magazines; motor; V.D. galvanometer; amplifier; 2-WE mikes; cables and cases. \$950 value ..... 4450.00  
MIRACLE DURALUMIN FREEHEAD TRIPODS, hydraulic tilt, smooth pan. Holds heavy 35mm cameras, Auricon 1200, Pro-600, Maurer, Mitchell. Tubular locking legs. \$350 value. new ..... 119.50  
AKELEY 35mm EDITING MACHINE, sound, picture, preview. \$3000 value ..... 1295.00  
NEW FRESNEL STUDIO SPOTS, lead wires, switch, pipe clamp. 2000 Watt.....\$59.95 50000 Watt..... 99.95  
10' TITLE ANIMATION STAND w/motorized zoom and stop motion. Completely wired with footswitches. Art table takes largest work. \$2500 value ..... 975.00  
DULLING SPRAY—SUBDUES HIGHLIGHTS from shiny surfaces. Wipes off clean without solvent. 12 oz. can.....\$1.95 Dozen lots..... 1.35  
BARDWELL-McALISTER MULTIPLE FLOODLIGHTS, 3 Quadruple heads to hold 12 bulbs on rolling tripod stand. Orig. Gov't Cost \$180. Surplus ..... 29.50  
BM QUADRITE Heads only \$4.95. Stands only B&H 16mm FILMO SPECIALIST CAMERA w/rackover, matte box, Mitchell type finder; syncmotor; 400' mag.; w/case. \$2000 value ..... 995.00  
CUSTOM BLIMP for B&H 70D with sync motor DUAL REKOKUT TRANSCRIPTION TURNTABLES with Gray 16" pickups, on cabinet pedestal. \$500 value ..... 225.00  
BRIDGMATIC 216B NEG./POS. PROCESSOR, 1800' per hour, w/elevators; airpump, recirculation, refrigeration. \$4000 value..... 1995.00  
CINEX EXPOSURE TESTING MACHINES—used by leading labs. Originally \$4000.00. Rebuilt ..... 1995.00  
DEPUÉ PICTURE REDUCTION PRINTER, 35/16 Optical. Rebuilt ..... 3995.00  
NEW AMPRO PA-3 TRI-PURPOSE Amplifiers. Maximum output 85 watts. List \$278.00, with tubes ..... 99.50  
BERNDT-MAURER CAMERA w/finder; 3 lenses; 4—400' magazines; sunshade; 12V motor; syncmotor; varispeed motor with tachometer; Mitchell tripod. \$6,000 value ..... 2495.00  
NEW 11"x14" ROLLER SCREENS, ropes & pulleys, mat white ..... 49.50  
AURICON DOUBLE SYSTEM RECORDER w/noise reduction amplifier ..... 295.00  
**TRADES TAKEN Cable: SOSOUND Dept. fc**  
**S.O.S. CINEMA SUPPLY CORPORATION**  
602 W. 52nd Street, New York 19. Phone PL 7-0440

## FOR SALE

GERMAN STILL 35mm cameras. Import your own. Save importers and retailers profits. (About 35%). Pay postman duties. Examples: EXAKTA. The only completely versatile 35mm camera. With:  
Automatic diaph. Zeiss Tessar F/2.8 .....\$159. (duty \$22.)  
Automatic diaph. Isco Westanar F/2.8 .....\$139. (duty \$19.)  
Automatic diaph. Schneider Xenon F/1.9 .....\$195. (duty \$26)  
Automatic diaph. Zeiss Biotar F/2.0 .....\$199. (duty \$26)  
Similar prices all other famous makes. All new. Latest 1955 production in original factory packing. Parcelpost and insurance included. No other charges. Pre-payment through bank and inspection on arrival guarantees you complete satisfaction before we are paid. Experienced, (and objective) advisory service, (please specify interests and requirements), and pricelists by return airmail. All transactions on money-back basis. WORLDPOST. TANGIER, MOROCCO.

## FOR SALE

**OUR 26th YEAR ★ ★ ★ ★ SUPPLYING EVERYTHING PHOTOGRAPHIC AND CINEMATIC**  
MATCHED PAIR OF HOLMES 35mm SOUND PROJECTORS. Magazine film capacity 2000' 12" Speaker & Amplifier, 1500 Watt Lamps. Value \$1600.00. Guaranteed.....\$ 635.00  
35mm DEBRIE CAMERA MODEL L/E featuring 1—28mm Schneider lens, 1—50mm Schneider F2. lens, 1—75mm Schneider F2.3 lens, Pilot Registration Pins, Direct focusing on ground glass, 6—400' magazines, DeBrie gearhead tripod, Matt box. Value \$2355.00 ..... 1250.00  
RADIANT FOLD-PAK WASHABLE SCREEN unused. 12"x16" New Value \$215.00 ..... 125.00  
ART REEVES SENSITESTER Combination 35mm and 16mm. Value \$2,000.00. Special..... 595.00  
B & H 16mm FILMO CAMERA Model 70-DA with 17mm f2.7 Wollensak, 1" f1.5 Dalmeyer, 2" f2.8 Schneider, 3" f4 B & H Teletar, and 6" f4.5 Telephoto Xenar Lenses; 2—400' Magazines; Motor; Wells Semi-Professional Tripod; Carrying Case. Value \$1,695.00. Special ..... 1150.00  
STANDARD MITCHELL 12 V Variable Speed Camera Motor. Factory Guarantee..... 300.00  
Also 110 V AC-DC Motor with Tachometer. Value \$580.00 ..... 395.00  
35mm B & H SINGLE SYSTEM SOUND CAMERA. Lenses: 40mm, 50mm, 75mm, 125mm. Modulator galvanometer, amplifier, motor, Tachometer. 2—1000' magazines, Tripod with Freehead, quick release legs, carrying cases. Guaranteed..... 3250.00  
SCHOEN PRINTER, sound and silent, color, B & W. Features: 16mm picture & sound together, film capacity 1600 feet, 50' per minute; 12 adjustable light changes; AC-DC conversion unit ..... 999.00  
LACO INCANDESCENT LAMP 24" Reflector. Five Kilowatts. Rolling Stand. Value \$246.00. Special ..... 110.00  
35mm DUPLEX PRINTER Adapted for sound track, excellent for duping. Academy Aperture. Speed 250 pictures per minute per side. Two light change boards, 18 different lights each side, 21 scenes. Motor 110 V, perfect mechanical condition..... 875.00  
MOLE RICHARDSON combination Microphone and Lamp BOOM. Rolling stand Special..... 235.00  
B & H CAMERA CHECK PAWL. High speed Shuttle. List Price new, \$1742.00. In good condition ..... 195.00  
B & H 12V or 24V EYEMO & FILMO MOTORS. New. Value \$142.00 ..... 95.00  
MOLE RICHARDSON 2000 Spot, rolling stand ENLARGERS, EXCELLENT CONDITION, ELWOOD. Auto focus, lens and stand. Size 5x7 ..... 235.00  
Size 8x10 ..... 400.00  
SPECIALIZING IN MOVIE AND TELEVISION SUPPLIES, TRIPODS, SYNCHRONIZERS, 16mm SOUND CAMERAS lights, lenses, mikes, booms, dollies, motors, etc. New—Used. Reasonable prices. Cash for used equipment. Trades taken.

**HOLLYWOOD CAMERA EXCHANGE, LTD.**  
**1600 CAHUENGA BOULEVARD, HOLLYWOOD 28, CAL.**  
16MM HOUSTON K-1A . . . developing machines. For reversal or positive film. Complete with refrigerator units, temperature control, condensers, evaporators, thermostats, etc. BRAND-NEW, prices reduced! Write. AIR PHOTO SUPPLY, Dept. C-1, 555 E. Tremont Ave., New York 57, New York.

AUDIO AKELEY single system camera complete with Akeley sound head, Gyro tripod, 3 lenses, view finder, Maurer mixing amplifier. Complete with cables, power supply and W. E. microphone. CAMERA EQUIPMENT CO., 1600 Broadway, New York 19. N.Y. Cable: Cinequip.

AURICON-PRO with follow focus, like new condition, includes 1" f/15 lens, \$950.00. Same as above but without galvo and amplifier, \$750.00. Auricon sound recorder with amplifier, \$650.00. SAMUEL KRAVITT, 763 Chapel St., New Haven, Conn.

BELL & HOWELL FILMOARC, Rollaway stand, two speakers never used, projector used very little and by same experienced projectionist. In perfect shape. Price \$1300.00. JERRY L. DRAKE, Box 8, Bolivar, Missouri.

PRECISION Magnetic Heads for Engineers - Industry Erase Record - Playback  
**STANCIL-HOFFMAN CORPORATION**  
921 North Highland Avenue  
Hollywood 38, California

## FOR SALE

**MOTION PICTURE EQUIPMENT NEW AND USED**  
ARRIFLEX 16, complete with 3 lenses, battery, charger and case.....\$2365.60  
NEUMADE FILM CLEANER, 2000' capacity. Like new ..... 325.00  
NEUMADE "SHOW TIMER," 16mm measuring device, converts footage to time. Demonstrator ..... 119.50  
MICRO-RECORD 16mm processing tanks and dryer. 200' capacity. \$302 value. Like new 195.00  
BOLEX SYNC MOTOR, excellent condition..... 125.00  
VICTOR "SILENT 16", 2000' capacity projector, variable speed, single frame, reverse. List \$265. Like new..... 199.95  
BELL & HOWELL ANGENIEUX, f.95 25mm lens ..... 220.93  
AND MANY OTHER ITEMS AT BARGAIN PRICES  
**WESTERN CINE SERVICE**  
114 East 8th Ave., Denver 3, Colorado

BASS . . . is headquarters for Arriflex 16, the new Zoomar 16, Cine Specials all models, Bell & Howell 70-DL, Bolex H-16: Used 35mm. Akeley #145 with Akeley Gyro tripod, matched pair Tessar 5 cm. F:2.7 lenses, magazines, case, extra lenses, \$250.00; Used 35mm. DeBrie Parvo Model G, all metal, 32mm. B&L W.A. F:4.5, 2" Tessar F:2.5, 50mm. Ultrastigmat F:1.9, 3" Goerz Hypar F:3.5, 12 cm. C. Z. Tessar F:4.5, masks, pan and tilt tripod, magazines, carrying cases, \$250.00; H-16 Deluxe Bolex, 11" F:1.5, 0.7" F:2.5 W.A., filter slot, \$275.00; Victor 5, 1" F:1.5, 3" F:3.5 Wollensak lenses, \$125.00; Cine Special II, 1" F:1.4 Ektor, optical finder, reflex finder, Yolo fader, Case, \$795.00. Best buys . . . Best trades always. BASS CAMERA CO., Dept. AC, 179 W. Madison St., Chicago 8, Ill.

**WE ALWAYS HAVE BARGAINS**  
in Professional 35 & 16mm equipment.  
**CAMERAS — LIGHTS**  
**MAGNETIC AND OPTICAL**  
**RECORDERS AND PLAYBACKS**  
**MOVIEOLAS — DOLLIES — BOOMS**  
Send for our constantly changing list.  
Hundreds of Other Production Items.  
Write — Wire — Phone  
**CINEMA SERVICE CORP.**  
106 West End Avenue, New York 23, N.Y.  
TRafalgar 3-1411

**WALL S. S. 35MM. SOUND CAMERA**  
COMPLETE with Galvanometer, amplifier, portable power supply, 40-50-75 and 100mm. lenses, erect image viewfinder, complete front attachments, two 1000 ft. magazines. Balanced Tripod, necessary carrying cases. Overhauled. Guaranteed perfect. Reasonable.

**CAMERA EQUIPMENT COMPANY**  
1600 Broadway New York 19, N. Y.

WE BUY, SELL AND RENT PROFESSIONAL AND 16mm EQUIPMENT, NEW AND USED. WE ARE DISTRIBUTORS FOR ALL LEADING MANUFACTURERS. RUBY CAMERA EXCHANGE, 729 Seventh Ave., New York City. Established since 1910.

MOVIOLA Model UDX composite with takeups also magnetic and optical sound, projection picture, \$950.00. LOUIS HANSEN, 139C N. Beachwood Dr., Burbank, California. THornwall 8-8953.

CINE Special I, new type magazine, "C" mount, 4" f/2.7 Eastman lens. \$325.00. VERNON FISHER, 1202 S.W. 22nd Ter., Miami, Florida.

## WANTED

**WE'VE GOT CASH WAITING**  
Cameras, Dollies, Lenses, Lights, Movieolas, Printers, Recorders, Studio or Laboratory Equipment. We also trade or take consignments. Set your own price—we'll get it.  
Western Union-WUX New York, Phone PL 7-0440

**S.O.S. CINEMA SUPPLY CORPORATION**  
Dept. fc Cable: SOSOUND  
602 W. 52nd Street New York 19, N. Y.

(Continued on Next Page)



# Classified Ads

(Continued from Preceding Page)

## WANTED

### IMMEDIATE CASH PAYMENT FOR CAMERAS AND EQUIPMENT

NEED EYEMOS (SINGLE LENS AND TURRET) MITCHELLS, ARRIFLEX, DE BRIES, B&H STANDARDS AND HI-SPEEDS, WALLS, AKELEYS, CINE SPECIALS, AURICONS, MAURERS, FILMOS. ALSO BALTARS, COOKES AND OTHER LENSES. SOUND STAGE LABORATORY AND EDITING EQUIPMENT OF ALL TYPES REQUIRED. PLEASE SHIP INSURED OR FORWARD DESCRIPTIONS AIRMAIL. IMMEDIATE PAYMENT.

GORDON ENTERPRISES • 5363 N. Cahuenga  
NORTH HOLLYWOOD, CALIFORNIA

### WANTED FOR SPOT CASH

Used Mitchell's, Auricons—other Cameras  
Moviolas—Editing Equipment—Projectors  
Spotlights—Sound Equipment

All Types Used Equipment  
From a Splicer to a Complete Studio

Write—Wire—Phone  
or Send Equipment in for Spot Cash

FLORMAN & BABB Murray Hill 2-2928  
68 West 45th Street New York 36, New York

## WANTED

PRODUCTION EQUIPMENT, LABORATORY EQUIPMENT, EDITING EQUIPMENT, 16mm. and 35mm. FROM SINGLE ITEMS TO COMPLETE STUDIOS. TRADES ACCEPTED.

### THE CAMERA MART, INC.

1845 Broadway Circle 6-0930 New York 23, N.Y.

### WANTED TO BUY FOR CASH

CAMERAS AND ACCESSORIES

MITCHELL, B & H, EYEMO, DEBRIE, AKELEY ALSO  
LABORATORY AND CUTTING ROOM EQUIPMENT

### CAMERA EQUIPMENT COMPANY

1600 BROADWAY, NEW YORK CITY 19  
CABLE: CINEQUIP

### F & B PAYS MORE FOR USED 16/35MM EQUIPMENT

WRITE — WIRE — PHONE

FOR OUR CASH OFFER

FLORMAN & BABB MU. 2-2928  
70 W. 45TH ST. NEW YORK 36, N.Y.

## WANTED

Mitchell — Akeley — B & H — Wall — Eyemo  
Cameras — Lenses — Equipment

### NATIONAL CINE EQUIPMENT, INC.

209 West 48th St. New York, N.Y.

USED Auricon Pro, B&H hot splicer, 16mm synchronizer. Write full details. H. EISENKRAMER,  
7550 Washington, St. Louis 5, Missouri.

WANTED Blimp for Maurer #05. Must have follow focus for Ektar lens. VENARD ORGANIZATION,  
Peoria 2, Illinois.

## POSITIONS WANTED

TALENTED CAMERAMAN has produced films all over continent for theatrical release by prominent studio, also TV release by others. These color and B&W films concentrated on travel, adventure, wildlife, won several American and foreign awards. Experienced in motion picture filming and stills, studio lighting, editing; has college background. Now available for assignment in similar work anywhere. For more details write: Mr. C. Gaum,  
729 North L St., Lake Worth, Florida.

INSTRUCTOR and author of numerous articles for leading photographic magazines, with 15 years practical experience in movie, still work and the manufacture of photographic equipment seeks challenging, responsible position in field of motion picture production, still photography, instruction, or as technical consultant. Box 1221, American Cinematographer.

NEGRO—Catholic, experienced cameraman, 35mm newsreel, 16mm color productions, editing, lighting, titling, also projectionist. MALCOLM MYERS,  
3424 Clark Ave., St. Louis 3, Missouri.

## POSITIONS WANTED

PERMANENT position wanted by 16mm cameraman familiar with all phases of industrial production. Write BOX 1220, American Cinematographer.

## ASSIGNMENTS WANTED

WELL KNOWN cameraman, experienced educational and TV film producer, having extensive 16mm color production set-up in India, Ceylon and Malaya, is open to produce films in those countries. Leaving America towards end of this year. Please write to M. P. S. VAN LIER, % Keesing,  
250 West 75th St., New York, N.Y.

CAMERAMAN-writer-editor: experienced cinematographer have traveled throughout the USA on assignments. Will take overseas duty, underwater, etc. Can also edit, prepare scripts, direct. College background, young, 35. Full particulars write BOX 1217, American Cinematographer.

ALASKA assignments, 16mm sound or silent, 35mm silent. DON CUTTER, 238 4th Avenue, Anchorage, Alaska.

## LABORATORY & SOUND

### ROCKY MOUNTAIN 16MM HEADQUARTERS

Processing — Printing — Recording  
Editing — Production — Rental — Sales  
DuPont, Eastman and Fastax films in stock.  
Write for Price List.

### WESTERN CINE SERVICE, INC.

114 E. 8th Ave., Denver 3, Colo. TAbor 5-2812

SOUND RECORDING at a reasonable cost. High Fidelity 16 or 35. Quality guaranteed. Complete studio and laboratory services. Color printing and lacquer coating. ESCAR MOTION PICTURE SERVICE, INC., 7315 Carnegie Avenue, Cleveland 3, Ohio. Phone Endicott 1-2707.

16mm SOUND and picture editing—sound recording—music—effects. DON DUNN'S EL RANCHO AUDIO, near Palos Verdes and L.A. Harbor. 26246 Fairview Avenue, Lomita, Calif. DAVenport 6-4925.

LABORATORY Services 16mm-35mm. Developing, Printing & Reduction. Reasonable. Quality guaranteed. NATIONAL FILM PRODUCTIONS, 955 Diana Ave., Akron, Ohio.

PRINTING! REASONABLE PRICES! FREE ESTIMATES! Sebastian 10934-C Hamlin, North Hollywood, Calif.

## INSTRUCTION, CORRESPONDENCE SCHOOLS, ETC.

NATIONWIDE SCHOOL OF CINEMATOGRAPHY—complete professional course in cinematography, covering all phases of motion picture production and technical aspects. Many leading newsreel and TV camera men started their careers with a Nationwide diploma. Course now available by mail at reduced rates, easy installment plan. For details write NATIONWIDE SCHOOL OF CINEMATOGRAPHY, Dept. A, 4211, Gaston Ave., Dallas, Texas.

## MOTION PICTURE STUDIO FOR SALE

A fully equipped motion picture studio in city with some of the largest commercial films in the world. No local competition. Also national film distribution service. Fine opportunity for a couple of wide-awake young men to acquire long-established profitable business. Owner desires to retire. Box 1221, AMERICAN CINEMATOGRAPHER.

## ANIMATION

(Continued from Page 613)

The cardboard container of the product was supported on glass. A stylized background was used under the glass and this background was dramatically lighted. By stopping the camera between action stages, a bar of margarine was made to appear to emerge from the box and shed its wrapper. Next, a knife cut off a portion which then zoomed up to a big closeup.

Since the cameraman doing this intricate filming rarely is acquainted with the details of the production discussed by the producer and client during the pre-production stage, he is given carefully-detailed exposure sheets, which become his shooting script. The importance of foolproof exposure sheets cannot be over-emphasized. These give the cameraman the exact information needed for shooting, and for handling the paper drawings, painted cels and backgrounds necessary to the production. In some cases, a single production will involve a thousand separate pieces of art.

The exposure sheet is ruled horizontally and vertically—chronological action from top to bottom, cel levels from right to left. Thus, the bottom cel on the compound table is tabulated at the extreme right whereas the top cel appears at the extreme left.

Listings on the exposure sheet are complicated when there are a large number of cel levels because the animator must get the desired action and see that there is no cel interference. Then, too, the exposure sheet must show characters and scenes keyed precisely to match sound effects and dialogue. Where mouth movement is involved, the exposure sheets show the frames where syllables occur and where words and pauses begin and end.

After the animator and his assistants have completed their work on the exposure sheet, a checker goes over all of the material before it is turned over to the cameraman for pencil test. The pencil test allows the animator to check the smoothness of his work. It also serves as a client checkpoint. The job is then turned over to the department where cels are inked, painted and polished for the camera. Prior to final shooting, a dry run takes place on a mock camera table where drawings, cels and cutouts are put through their paces in the sequence shown on the exposure sheet. This verifies whether the components work mechanically.

Following this, regular animation photography of the production begins.



Here . . .  
on this page  
you'll find  
BARGAINS  
GALORE

in  
New and Used Equipment  
of all kinds.

•  
A good place for YOU  
to sell, too!  
Rates Are Low!



# new—

**Kodak shutter development combines  
sound-and-silent versatility with  
40% extra screen brilliance!**

How amazing new **SUPER-40**

Shutter increases projector  
versatility and brilliance:

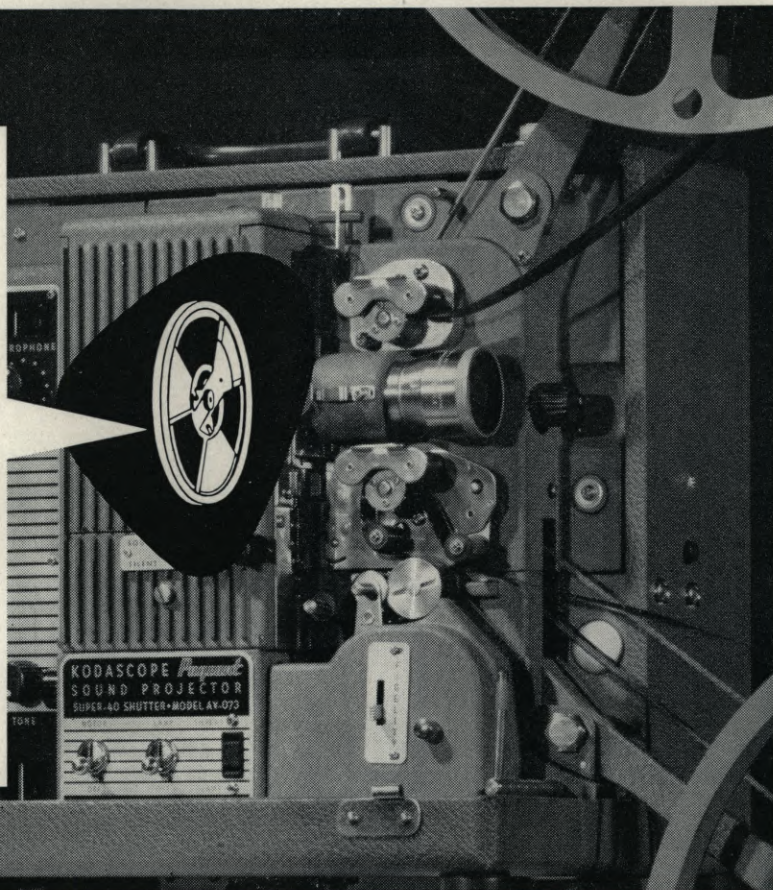


1. Switch on at silent speed. The Super-40 Shutter automatically presents three shutter blades to produce 48 light interruptions per second, the motion-picture-industry standard for comfortably flicker-free projection.

2. Switch to sound speed. Super-40 Shutter shifts automatically to two blades. You can see the picture brighten by more than 40%! Yet there are still 48 light interruptions per second, and your movies remain comfortably free from flicker!



3. Or lock the shutter in 3-bladed position when you don't need the extra brilliance. (To return to automatic shifting, just release the locking lever.)



**Now in Pageant A-V models without extra cost...**

## Kodak's amazing new SUPER-40 Shutter

Kodascope Pageant Sound Projectors have long been respected as outstanding in all 16mm. sound projection's most important characteristics. Exclusive permanent pre-lubrication, for example, makes Pageants the easiest of all projectors to maintain, the surest to use, and the most permanently quiet in operation. And there are other features, like the unique sound-focusing Fidelity Control and the built-in field-sharpening element, that make Pageants outstanding in sound and picture quality, too.

Now, with the Super-40 Shutter, there's still another basis of Pageant superiority. This amazing shutter provides *more than 40% extra illumination* at sound-speed operation; yet thanks to its automatic-shift feature, movies are comfortably free from flicker at both sound and silent speeds.

Pageant Sound Projectors, more than ever, merit top recommendation, because Pageants have now achieved a versatility of performance never before approached in 16mm. projection! The Super-40 Shutter equips Pageant A-V Model Projectors for both sound and silent operation... makes them capable of projection not only under "normal" conditions, but also under difficult conditions of illumination, in hard-to-darken rooms, in large halls—wherever additional brilliance, extra-long "throws," or unusually large images are required!

The Super-40 Shutter is supplied without extra cost in any of three new Kodascope Pageant Sound Projector models of varying amplifier output and speaker capacity. See your Kodak Audio-Visual Dealer for full details... or just mail the coupon for a new free Pageant Projector catalog.



**EASTMAN KODAK COMPANY, Dept. 8-V, Rochester 4, N. Y.**

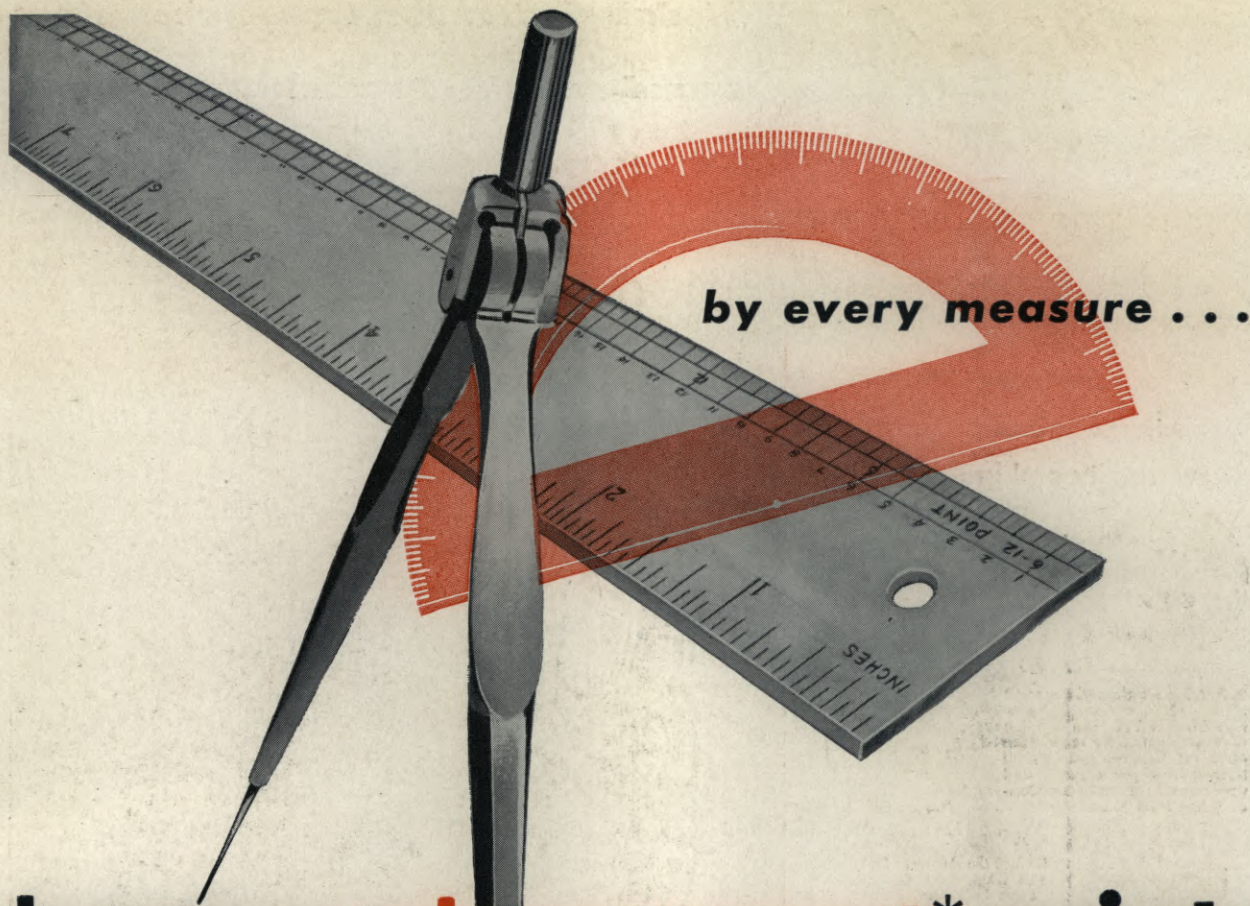
Please send catalog on  
new Pageant Projectors  
with Super-40 Shutters.

NAME \_\_\_\_\_  
TITLE \_\_\_\_\_  
ORGANIZATION \_\_\_\_\_  
STREET \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_  
(Zone)

10-11

**Kodak**  
TRADE-MARK





by every measure . . .

# byron **color-correct**\* prints...

You'll also  
get the **highest standard**  
of 16 mm. production when you  
use these byron facilities:

script  
art  
titling  
animation  
editing  
sound effects  
recording  
location photography  
music library  
sound stage  
complete black and white  
laboratory facilities  
*Reeves magna-stripe\**

## industry's highest standard of color duplication

Only byron can make "Color-Correct\*" prints, for  
"Color-Correct\*" is byron's exclusive patented process  
that assures top quality color duplicates every time.

"Color-Correct\*" has often been used *incorrectly* —  
to mean mere balancing of color from scene to scene . . .  
but byron "Color-Correct\*" goes far beyond that. From  
every standpoint, "Color-Correct\*" is the highest standard  
for color duplication; yet, surprisingly enough, byron  
prices are among the lowest in the industry. Next time you  
order color duplicates, specify byron "Color-Correct\*" prints.

**byron** Studios and Laboratory

1226 Wisconsin Ave., N.W., Washington 7, D.C.

DUpont 7-1800

\*Reg. U.S. Pat. Office

SEND FOR YOUR COMPLIMENTARY COPY OF THE 3 ILLUSTRATED BULLETINS ON "PRE-PRINT PREPARATION" AS DEVELOPED AND RECOMMENDED BY THE ASSOCIATION OF CINEMA LABORATORIES